

Setter

Volume Report H1 2018

Highlights

The Setter Capital Volume Report analyzes global secondary market activity in H1 2018 and covers the following topics:

- › Total Volume of Secondary Deals
- › Secondary Volume H1 2018 vs. H1 2017
- › Breakdown of Volume between Funds and Directs
- › Breakdown of Volume by Type of Assets Purchased
- › Breakdown of Volume by Geography of Assets Purchased
- › Profile of Buyers
- › Number of Deals and Average Deal Size
- › Buyers' Scope of Interest
- › Buyers' Return Targets
- › Profile of Sellers
- › Percentage of Intermediated Deals
- › Predicted Secondary Deal Volume for FY 2018
- › Changes in the Level of Competition
- › Changes in Debt Levels
- › Expected Returns of Secondary Purchases
- › Expected Distribution and NAV Changes in H2 2018
- › General Partners' Approach to the Secondary Market

The survey

As the secondary market continues to grow and evolve, we seek to take a comprehensive and methodical approach to quantifying the market and identifying trends. Using a survey approach, we asked principals directly the same questions that buyers, sellers, agents and secondary fund LPs often ask us. How much was completed in H1 2018? How much was completed in LBO, venture, real estate, infrastructure and hedge fund secondaries? What are the expected returns and buyer debt levels?

This report summarizes the results of our survey of the most active global buyers in the secondary market for alternative investment funds conducted in early July 2018. Volume is defined as total exposure (NAV + unfunded in USD) purchased by the respondents, including only deals where a binding agreement was entered into during H1 2018. Please note the '\$' sign denotes USD throughout this report.

We were pleased by the high response rate as 100 of the 125 most active and regular buyers in the secondary market agreed to share their confidential results (see partial list of participants on page 23). Given the high response rate and the fact that all ten of the largest buyers participated, the respondents to our survey represented 94.2% of the transaction volume, making it the most reliable and detailed study of the industry's activities.

Being mindful of response bias, we compared the list of respondents to those who had declined to respond and did not find any obvious or meaningful differences in the known and observed levels of activity between the two groups. We then estimated and charted the total volume, number of transactions, and other reported figures herein by prorating the survey results based on the proportion of small, medium and large buyers that participated.

We hope you find the results interesting and useful. We welcome any questions and would be happy to provide further insights into the results.

H1 2018 in review

After recording a record \$60.7 billion in 2017, secondary market volume hit a staggering \$36.7 billion in the first half of 2018, representing a 26.2% increase from the volume recorded in the **Setter Capital Volume Report H1 2017**.

Volume was up across most alternative asset classes. The private equity secondary market (funds and directs) increased 29.8% year over year, to a total of \$31.5 billion. Real estate secondaries (funds and directs) were down 2.4% to \$3.1 billion and hedge fund secondaries were up 5.5% to \$520 million. Private equity fund secondaries were up 10.1% (\$19.2 billion in H1 2018 from \$17.4 billion in H1 2017), driven by the strong market for both LBO funds (up 14.1%) and purchases of fund of funds and secondary funds (up 43.7%). Private debt secondaries were down 11.9% (\$580 million in H1 2018 from \$649 million in H1 2017) and energy fund secondaries were down 8.9% (\$810 million in H1 2018 from \$882 million in H1 2017).

Traditional fund secondaries were up 9.5% from \$21.38 billion in H1 2017 to \$23.06 billion in H1 2018, while 'direct secondaries' increased significantly, up 77.1% from \$7.7 billion to \$13.6 billion (private equity directs were \$12.37 billion and real estate directs were \$1.27 billion). Indeed, 53.4% of the survey respondents felt that meaningfully more GPs coordinated tender offers to their LPs or attempted to liquidate or restructure older funds in H1 2018 as compared to H1 2017 and 31.9% of respondents felt that a materially higher number of GPs sought staples in H1 2018 as compared to H1 2017.

While the breadth and number of buyers continued to increase, the most significant activity was driven by the large buyers in the market. The fourteen largest buyers, defined as those that deployed more than \$600 million in H1 2018, accounted for 63.4% of the market's total volume (vs. 61.9% in H1 2017), driven largely by the increase in larger portfolios for sale and the record amounts of capital raised by the big players. 43 mid-sized buyers accounted for roughly 28.6% (vs. 25.6% in H1 2017) and 68 small buyers represented 8.0% (vs. 12.05% in H1 2017). Buyers continued to diversify their secondary focus with about 17% of participants buying other alternative investment types for the first time (infrastructure, real estate, etc.).

Buyer competition for deals continued to heat up in H1 2018 as noted by 21.3% of respondents who felt it was significantly higher than last year (vs. only 1.3% of respondents that felt it was lower). As a means to stay competitive, the use of debt to improve pricing and deal returns became even more prevalent as 15.3% of respondents felt that buyers had used significantly more leverage in H1 2018 as compared to the prior year and not a single respondent felt buyers used less leverage.

Agents intermediated \$23.7 billion in deals in H1, an increase of 36.1% over H1 2017. We expect the level of intermediation to rise in response to the entrance of new agents and as sellers struggle to stay on top of the ever-growing buyer universe.

There were a total of 746 transactions in H1 2018, with an average size of approximately \$49.19 million. The number of transactions was down 18.75% from the 874 transactions completed in H1 2017, while the average deal size increased 49.70%, driven by the large number of \$500 million plus transactions completed in the first half.

The ranks of sellers continued to grow as more institutions looked to actively manage their private market portfolios. Managers of funds across LBO, VC, hedge funds, fund of funds and secondary funds accounted for 42.8% of all sellers, as they continued to use the market to drive liquidity in their funds or liquidity to their LPs through coordinated tender offers. Pensions were the next most active sellers, accounting for 23.2% of H1 2018 volume, up from 15.40% in H1 2017, while endowments and charities accounted for 3.1% and sovereigns accounted for 5.4% of volume. Looking forward, most buyers expect fund of funds and secondary funds to be the biggest sellers in H2 2018 (30.5% of total transaction volume).

From a geographical perspective, North American sellers accounted for the largest proportion of volume in H1 2018 selling \$22.33 billion (60.9% vs. 44.8% in H1 2017), whereas Western European sellers sold \$10.64 billion (29.0% vs. 34.2% in H1 2017) and Asia-Pacific sellers accounted for about \$2.85 billion (7.8% vs. 10.1% in H1 2017) year over year. Interestingly, other geographies such as the Middle East accounted for 2.4% of the total volume in H1 2018 were down significantly from 10.8% in H1 2017.

Buyers, on average, estimate NAV valuations will increase 2.3% in H2 2018, while the pace of distributions will increase 2.0%. These forecasts are more optimistic than those in the **Setter Capital Volume Report H1 2017**, where buyers expected distributions to increase by .59% and NAV valuations to increase by 1.21% in the following half year.

Looking forward, buyers expect FY 2018 volume to be \$66.40 billion, which would be an increase of 9.3% from the \$60.74 billion transacted in H1 2018. This is less optimistic than what buyers expected at the end of 2017, when they expected volume growth to be 9.3% in the coming year.

More Insight.

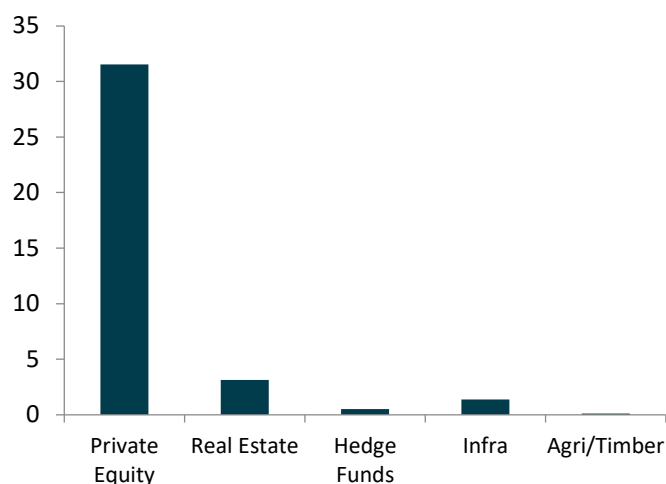
In the secondary market, knowledge is power.
By providing granular custom portfolio analysis and
industry-leading market research, we empower our
clients to make the most informed decisions.

Setter

Total volume

Total secondary market volume for H1 2018 was \$36.7 billion. This is the volume estimate derived from the 125 secondary buyers surveyed with dedicated secondary efforts and includes 69 secondary funds, 41 funds of funds, 10 hedge funds, 4 investment consultants, and 1 pension. We believe this estimate is reliable as the 100 survey respondents alone reported \$34.56billion of volume in their survey responses. The figure is also conservative, as **it does not include the activity of over 1000 opportunistic and non-traditional buyers**, whose combined activity may be significant. For instance, the activities of all sovereign funds (including ADIA, ADIC, GIC, Temasek, etc.) were excluded entirely, even though some have built teams dedicated to secondary purchases.

Types of assets purchased



Private Equity (Directs¹ & Funds): \$31.53 billion
(29.8% increase YoY)

Real Estate (Directs & Funds): \$3.14 billion
(2.4% decrease YoY)

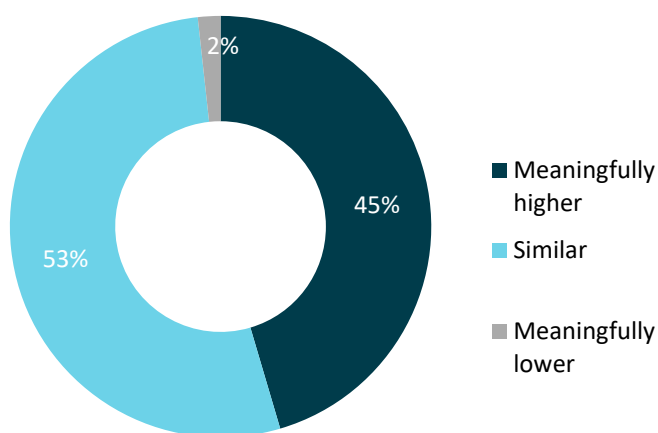
Hedge Funds: \$520 million
(5.5% increase YoY)

Infrastructure Funds: \$1.39 billion
(46.6% increase YoY)

Agri/Timber Funds: \$120 million
(7.5% increase YoY)

Directs include fund recapitalizations and restructurings, fund liquidations, and purchase of single minority stakes and co-investments.

H1 2018 volume vs. H1 2017 volume

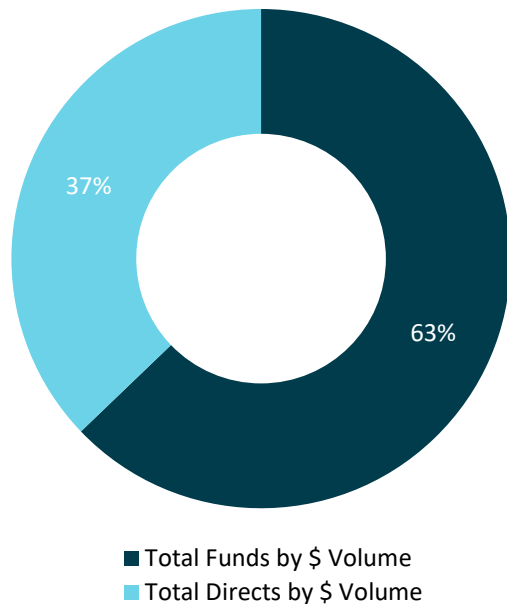


H1 2018 volume increased 26.2% compared to H1 2017, which was \$29.1 billion.

45.4% of survey respondents felt their volume was significantly higher while only 1.7% felt their volume was significantly lower.

Assets purchased

Funds vs. Directs



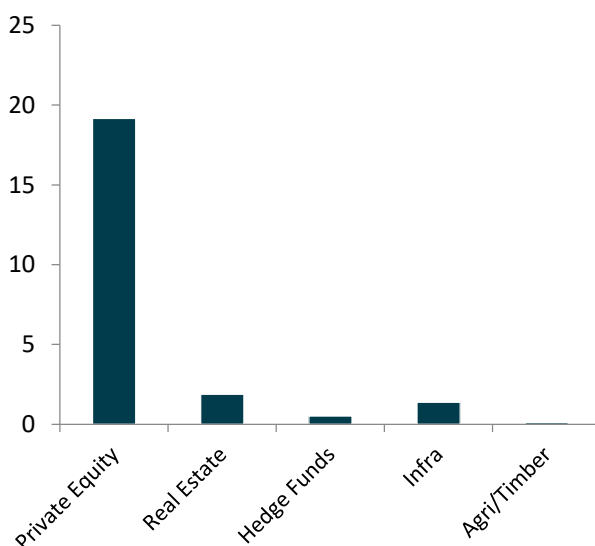
In H1 2018, \$23.06 billion of funds (62.8 %) and \$13.64 billion of directs (37.2 %) were purchased.

Fund secondaries increased 7.9 % in H1 2018, from \$21.38 billion recorded in H1 2017. Secondaries of direct investments¹ increased from \$7.69 billion in H1 2017 to \$ 13.64 billion in H1 2018, which represents a 79.2% increase in private equity directs and real estate directs accounted for 90.7% and 9.3% respectively of the total directs volume.

Survey respondents estimated that the split between fund and direct secondaries in 3 years would be 68.2% funds and 31.8% directs.

¹ Secondaries of direct investments includes GP restructurings and purchases of single minority stakes and co-investments.

Breakdown of fund secondaries



Private equity fund purchases totaled \$19.16 billion (10.2% increase YoY)

Real estate fund purchases totaled \$1.87 billion (23.2% decrease YoY)

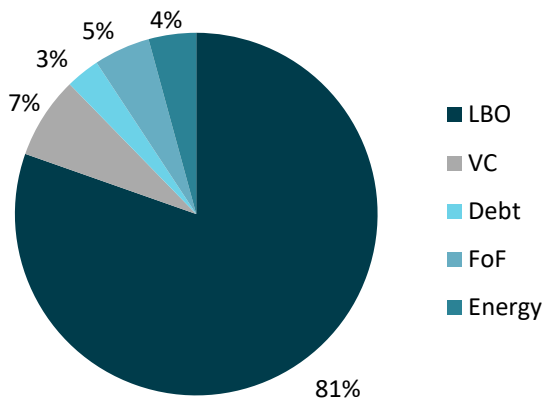
Hedge fund purchases totaled \$520 million (5.5% increase YoY)

Infrastructure fund purchases totaled \$1.39 billion (46.6% increase YoY)

Agri/Timber fund purchases totaled \$120 million (7.5% increase YoY)

Types of funds purchased

Private Equity Funds



LBO – \$15.40 billion
(Up 14.0% YoY from \$13.51 billion)

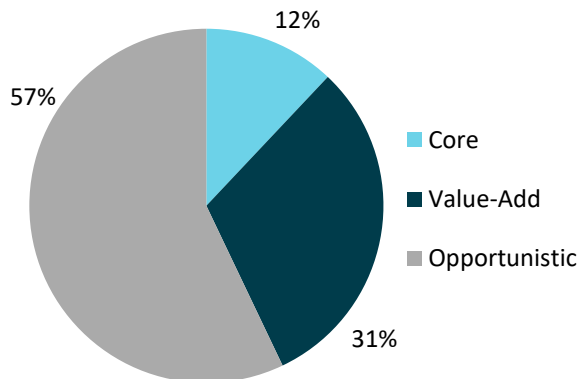
VC – \$1.40 billion
(Down 18.0% YoY from \$1.71 billion)

Debt – \$580 million
(Down 10.4% YoY from \$648 million)

Fund of Funds – \$960 million
(Up 53.6% YoY from \$627 million)

Energy – \$810 million
(Down 7.9% YoY from \$882 million)

Real Estate Funds

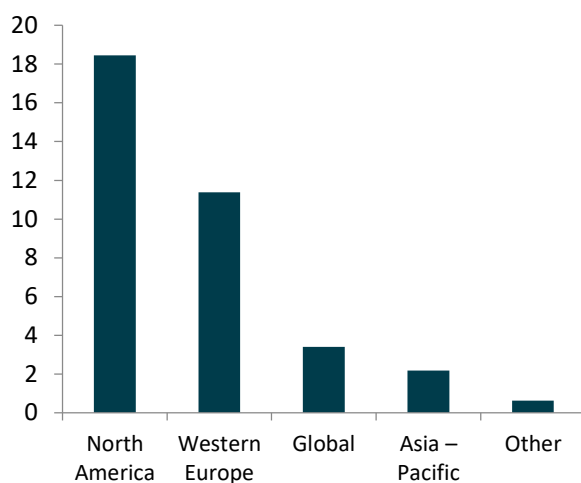


Core – \$230 million
(Down 2.9% YoY from \$232 million)

Value-Add – \$ 580 million
(Down 38.1% YoY from \$935 million)

Opportunistic – \$1.07 billion
(Down 16.1% YoY from \$1.275 billion)

Geography of assets purchased



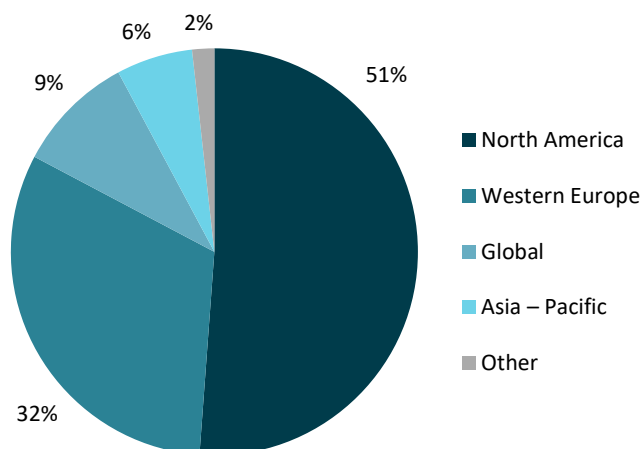
North American and Western European focused funds/directs accounted for the vast majority of assets purchased in H1 2018:

North America – \$ 18.45 billion
(Up 22.9% YoY from \$15.02 billion)

Western Europe - \$11.38 billion
(Up 48.9% YoY from \$7.66 billion)

Global – \$3.41 billion
(Up 16.7% YoY from \$2.92 billion)

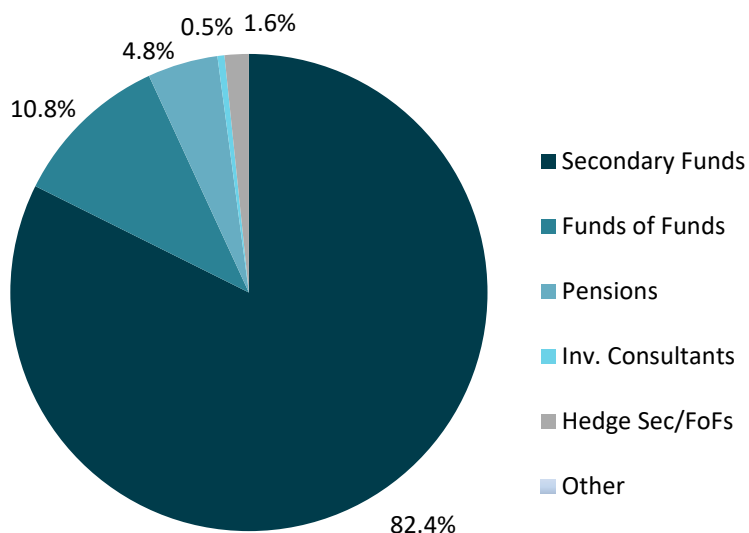
Asia-Pacific – \$2.19 billion
(Down 27.8% YoY from \$3.027 billion)



In terms of percentage, North America focused funds and directs accounted for 51.2% of total volume, Western European funds and directs accounted for 31.6 % and Asia-focused funds and directs accounted for 6.1% of sales.

Profiles of buyers

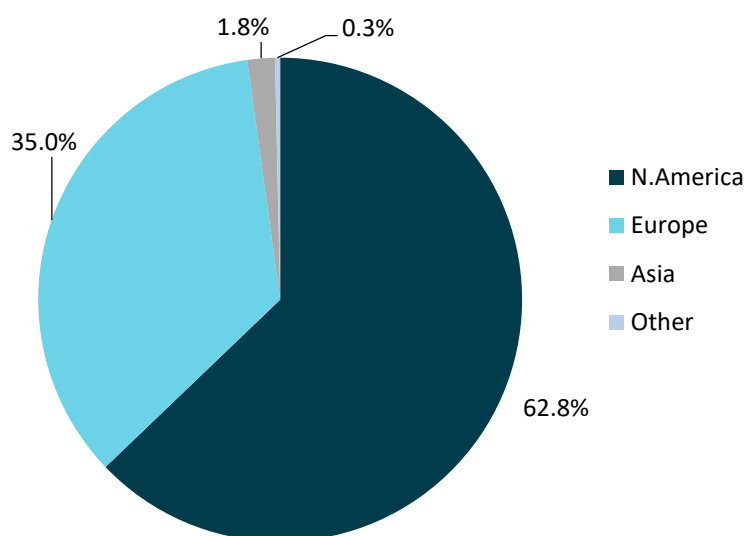
Type of buyers



Secondary funds were the most active buyers in H1 2018, accounting for 82.4% (\$30.23 billion) of total purchases while funds of funds accounted for 10.8% (\$3.95 billion).

Please note: over 1,000 non-traditional buyers were not included in our survey and the resulting estimates.

Location of buyers¹



North American buyers transacted the most (62.8% of total volume) in H1 2018, down from 69.20% total volume in H1 2017.

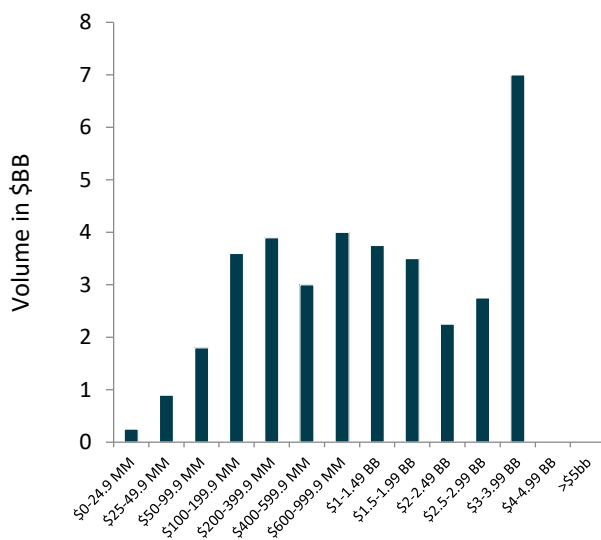
European buyers accounted for 35.0% of total volume in H1 2018, which was higher than H1 2017 (29.50%).

¹ Location is based on head office location.

Activity levels of small, medium and large buyers

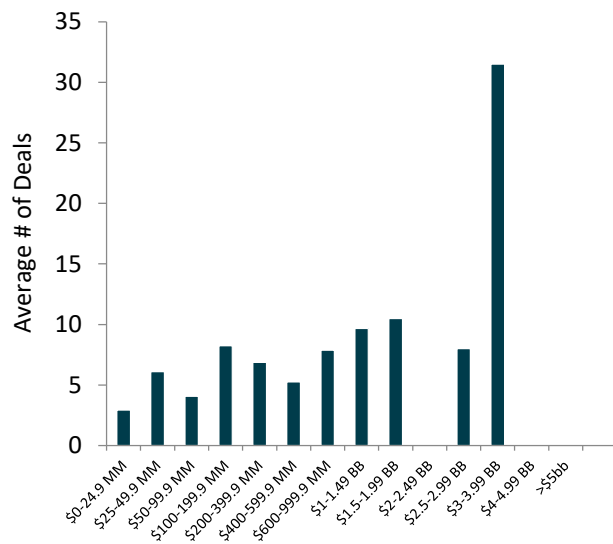
Applying the survey respondents' dollar volume and transaction numbers, while taking into consideration the proportion of small, medium and large buyers that did not participate, we estimated the market share of small, medium and large buyers as follows:

Volume distribution by size of buyer



Buyers Grouped by Their Volume \$MM

Average number of transactions by size of buyer



Buyers Grouped by Their Volume \$MM

14 large buyers (defined as those that deployed \$600 million or more in H1 2018) purchased \$23.25 billion, representing approximately 63.4% of total volume across 176 transactions with an average deal size of \$132.46 million. This was an increase from H1 2017, where large buyers accounted for 61.90%.

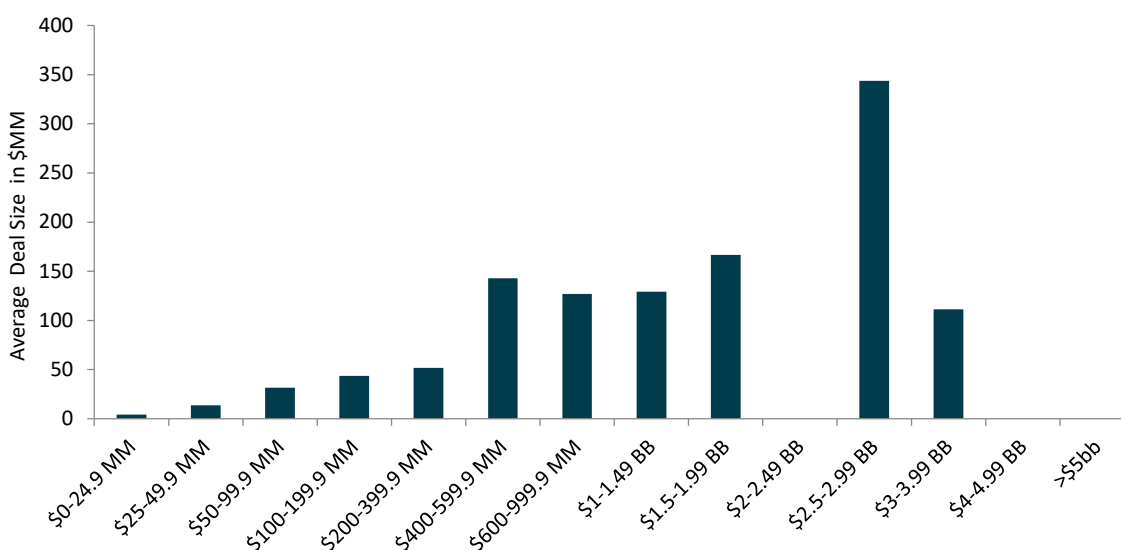
43 medium sized buyers (defined as those that deployed \$100 million to \$600 million in H1 2018) purchased \$10.5 billion, representing approximately 28.6% of total volume across 276 transactions with an average deal size of \$37.99 million. This was an increase from H1 2017, where they accounted for 25.60% .

68 small buyers (defined as those that deployed less than \$100 million in H1 2018) purchased \$2.95 billion, representing approximately 8.0 % of total volume across 294 transactions with an average deal size of \$10.03 million. This was decrease from H1 2017, where they accounted for 12.50% .

Number of deals and average size deal

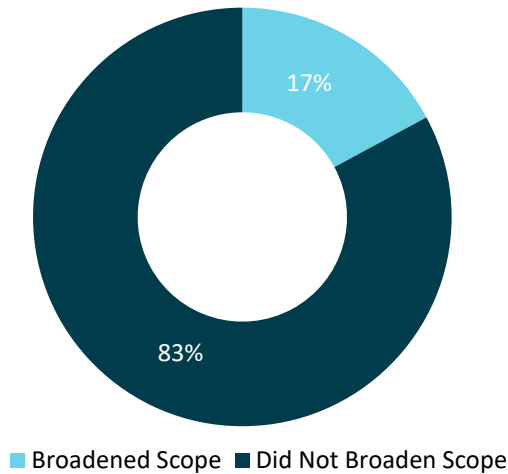
Buyers completed 746 transactions in H1 2018 across the entire secondary market for alternative assets, with an average size of approximately \$49.19 million. The number of transactions decreased 14.6% from 874 transactions in H1 2017, while the average deal size increased significantly, up 47.8% from \$33.279 million in H1 2017.

Average deal size by size of buyer



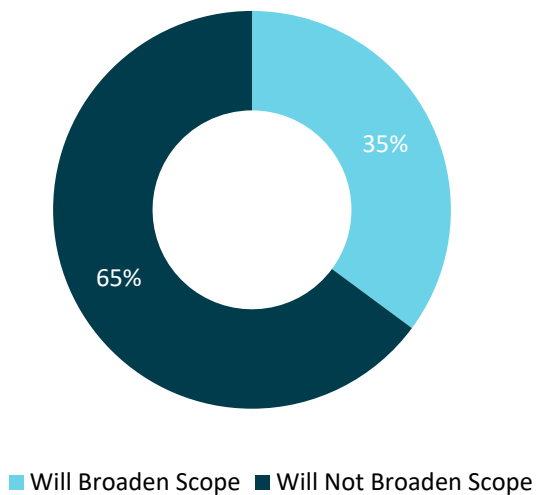
Buyers' scope of interest

Buyers that broadened their focus in H1 2018



17.1% of participants broadened their secondary focus in H1 2018 to include buying other alternative investment types (e.g. infrastructure, real estate, direct secondaries, etc.).

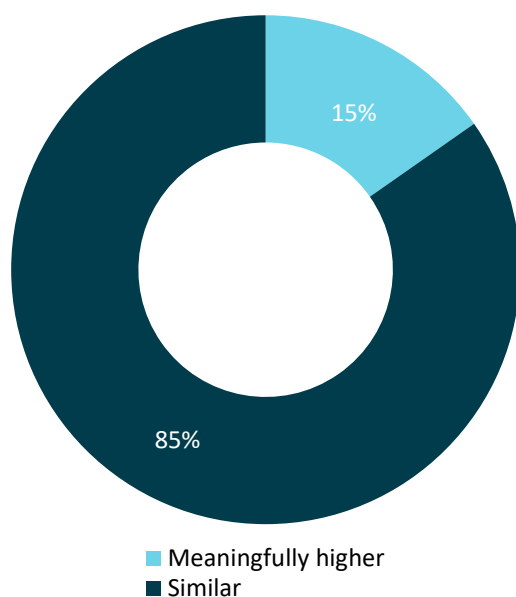
Buyers that intend to broaden their focus in H2 2018



35.1% of participants plan to broaden their secondary focus in H2 2018 include buying other alternative investment types.

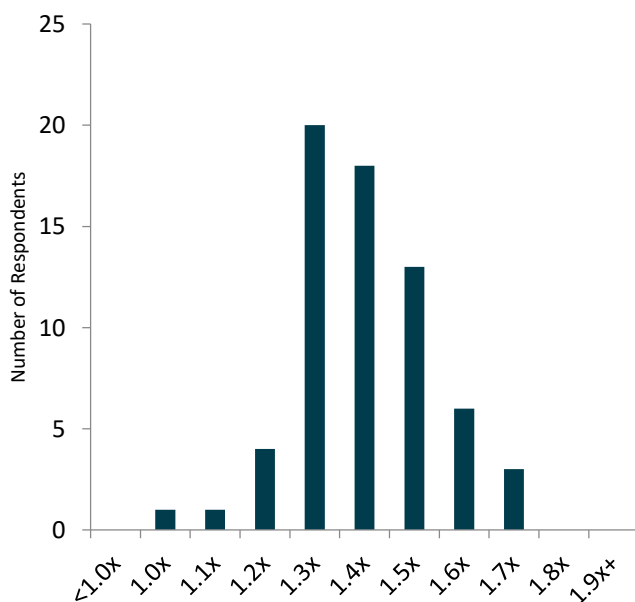
Leverage and returns

Level of debt used by buyers in H1 2018 vs. H1 2017



15.3% of respondents believed the level of debt used by buyers had increased significantly in H1 2018. 84.7% felt it was the same and no respondents felt it was less.

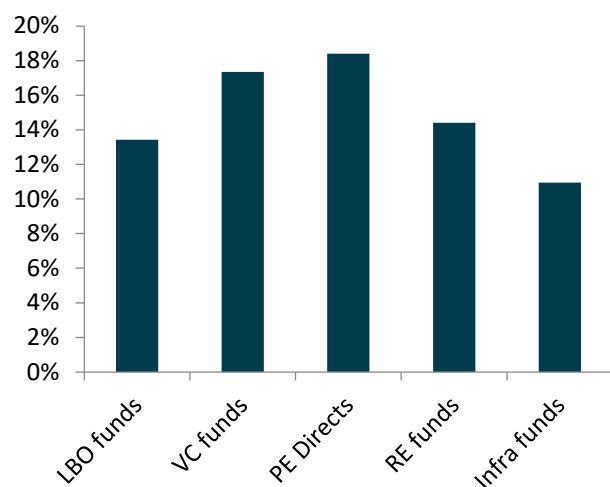
Expected multiple for secondary deals completed in H1 2018



Respondents predicted that the average gross multiple for secondary deals completed in H1 2018 would be 1.40x, which was slightly higher from the 1.36x multiple buyers expected from deals completed in H1 2017.

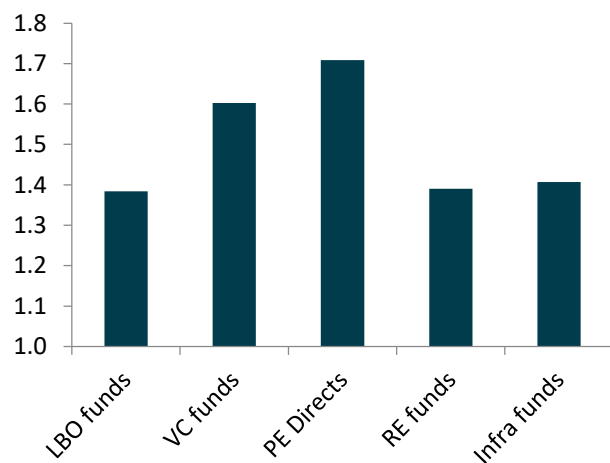
Buyers' return targets

Targeted IRRs on secondary purchases



When underwriting new purchases, the 100 survey respondents estimated their peers' average targeted IRR to be 13.4% for LBO funds, 17.4% for VC funds, 18.4% for PE direct, 14.4% for real estate funds and 10.9% for infrastructure funds.

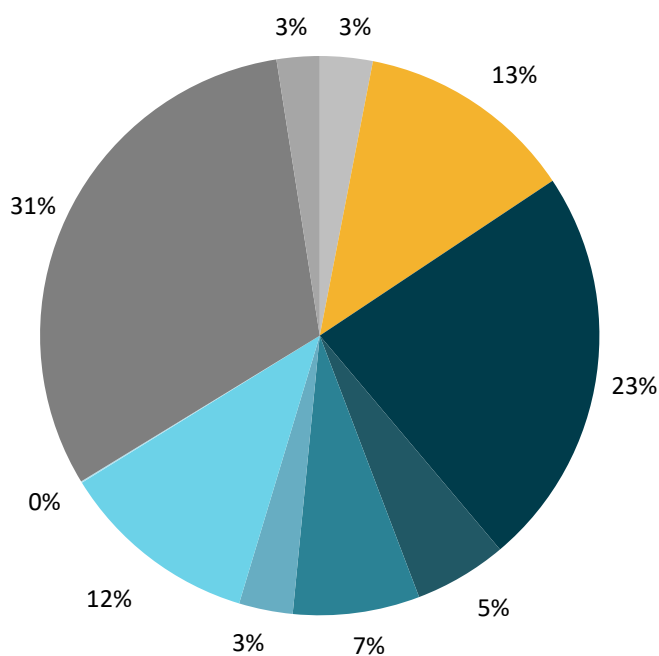
Targeted multiples on secondary purchases



On average, the 100 buyers estimated their peers' targeted multiples to be 1.38x for LBO funds, 1.6x for VC funds, 1.71x for PE direct, 1.39x for real estate funds and 1.41x for infrastructure funds.

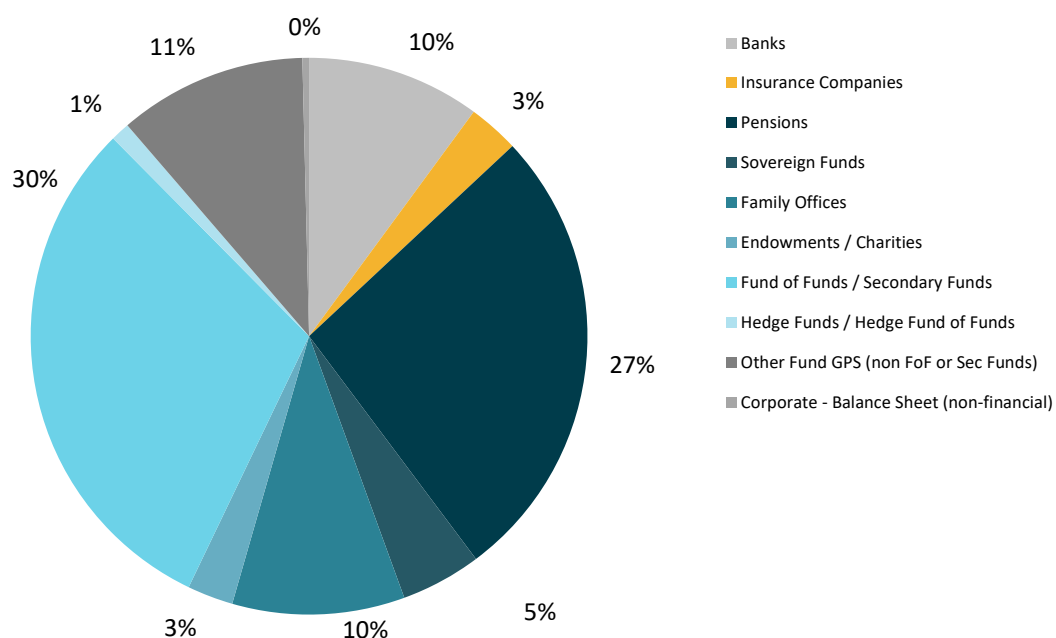
Seller profiles

Type of sellers in H1 2018



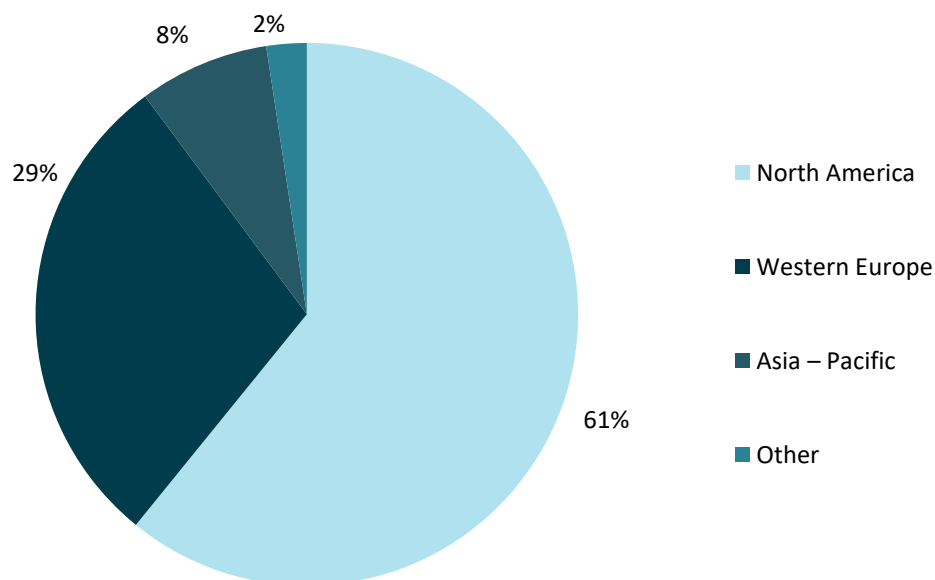
Pension funds and GPs (that are not fund of funds or secondary funds), were the most active sellers in H1 2018 making up 23.2% and 31.2% of the H1 2018 volume, respectively. Most buyers expect fund of funds and secondary funds to be the biggest sellers in H2 2018 (30.5% of total transaction volume).

Expected sellers in FY 2018

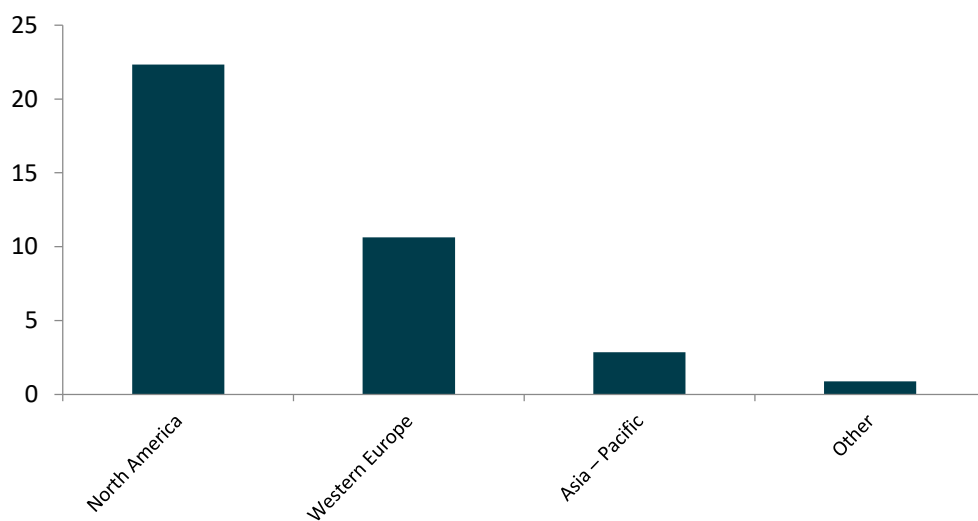


Seller location

Geography of sellers

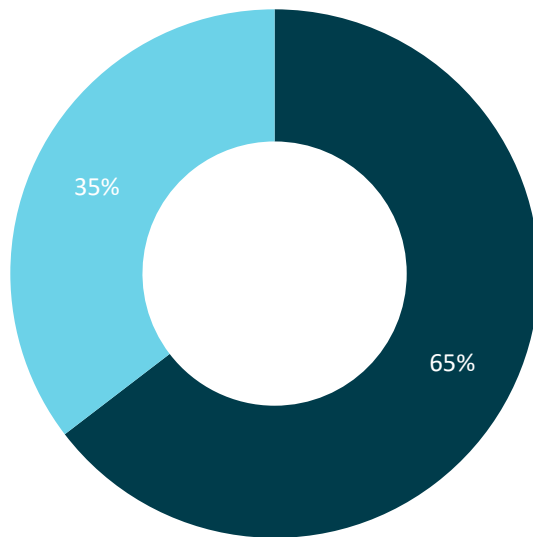


In terms of the location of sellers, North American and Western European sellers accounted for the vast majority of volume in H1 2018. North American sellers sold \$22.33 billion (60.9% vs. 44.8% H1 2017), whereas Western European sellers sold \$10.64 billion (29.0% vs. 34.2% in H1 2017). Asia-Pacific sellers accounted for 7.8% of the total volume down from 10.1% in H1 2017. Other geographies, such as the Middle East accounted for 2.4% of the total volume in H1 2018, down significantly from 10.84% in H1 2017.



Intermediation and level of competition

Volume of intermediated transactions

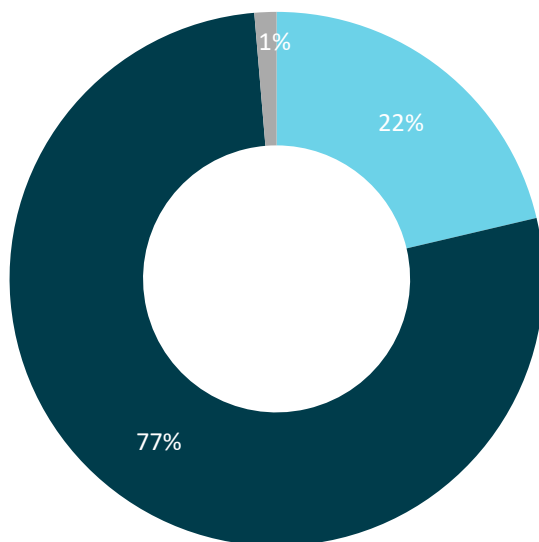


■ Total Volume Involving Intermediary
■ Total Volume Not Involving Intermediary

Approximately 64.6% (\$23.71 billion) of total secondary volume involved an intermediary, on either the buy or sell-side, as compared to 59.90% in H1 2017.

In terms of volume, agents intermediated \$6.2 billion more in deals, an increase of 36.1% over H1 2017.

Buyer competition for deals in H1 2018 vs. H1 2017

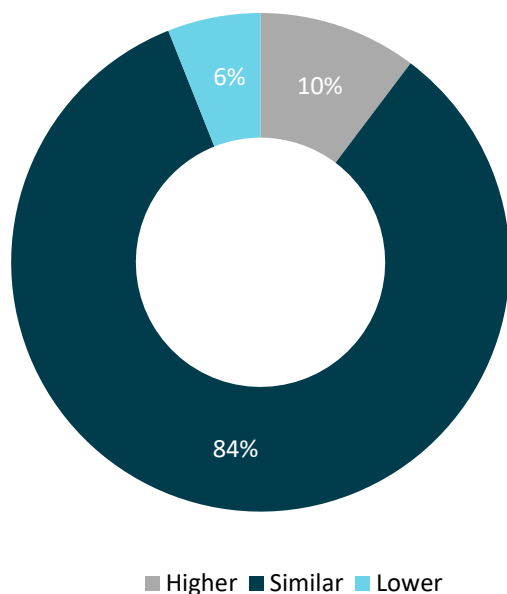


■ Meaningfully Higher ■ Similar ■ Meaningfully lower

77.3% of respondents felt buyer competition in H1 2018 was similar to H1 2017, while 21.3% felt buyer competition was significantly higher. 1.3% of survey respondents felt buyer competition was lower in H1 2018.

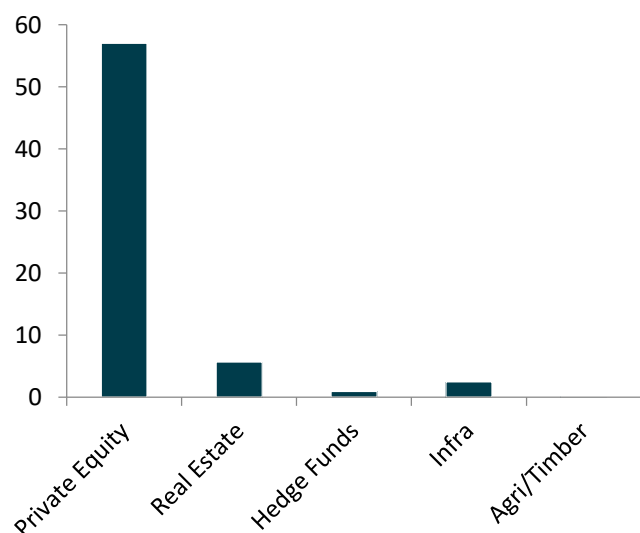
Projected volume for FY 2018

How H2 2018 volume will compare to H1 2018



10.3% of respondents felt that their H2 2018 volume will be meaningfully higher than H1 2018, while 6.0% of respondents felt that it will be meaningfully lower and 83.7% felt that it will be similar.

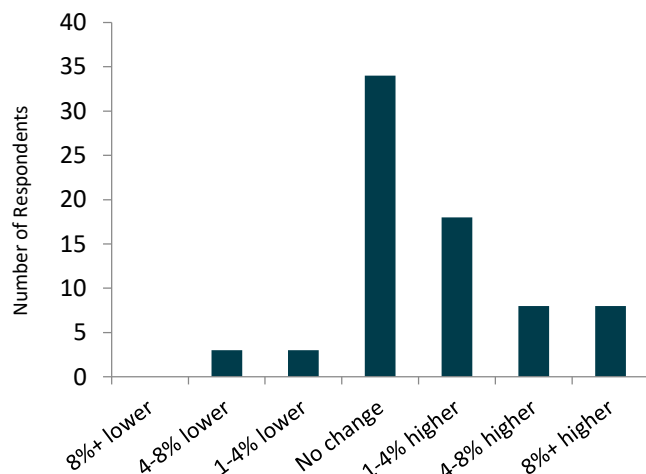
Predicted volume for FY 2018



Respondents predicted total volume for FY 2018 to be \$66.40 billion, which would represent a 9.32% increase from the \$60.74 billion transacted in FY 2017. Assuming proportions do not change in H2 2018, this suggests private equity volume will be \$57.05 billion in FY 2018, real estate will be \$5.69 billion, hedge funds will be \$940 million, infrastructure will be \$2.51 billion and agriculture & timber will be \$220 million.

Expected distribution and NAV changes in FY 2018

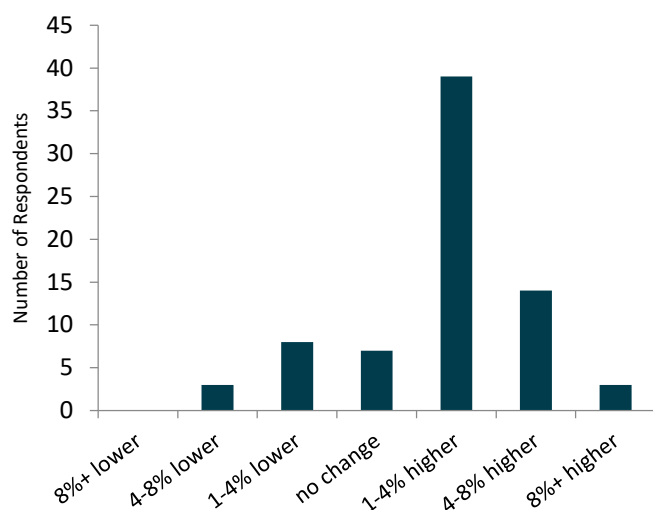
Distribution Pace in H2 2018 vs. H1 2018



Respondents expect the pace of distributions in H2 2018 to be higher than H1 2018 as the average response suggests an expected increase of 2.0%.

Respondents are more optimistic than they were in H1 2017, when they expected the pace of distributions to be only up 0.59%.

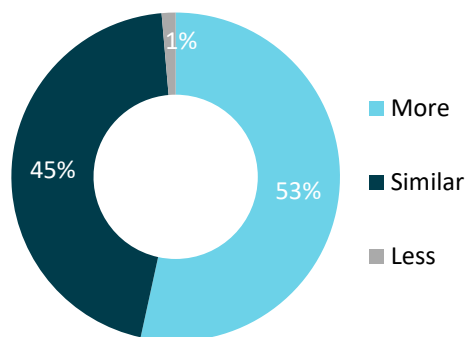
Change in NAV in H2 2018 vs. H1 2018



On average, respondents expect NAV valuations to increase by 2.3% in H2 2018 compared to H1 2018. Respondents were more optimistic than H1 2017 when they expected NAVs to increase by 1.52% in the upcoming year.

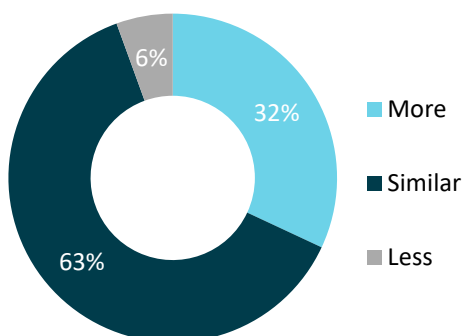
General partners' approach to the secondary market

Liquidations and restructurings in H1 2018 vs. H1 2017



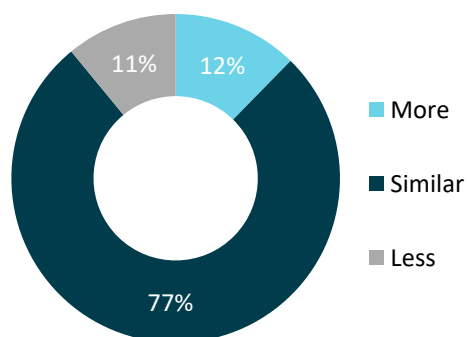
53.4% of respondents felt that meaningfully more GPs attempted to liquidate or restructure older funds in H1 2018 compared to H1 2017.

Staples sought by GPs in H1 2018 vs. H1 2017



31.9% of respondents felt that meaningfully more GPs sought staples in H1 2018 as compared to H1 2017.

GP restrictiveness on transfers in H1 2018 vs. H1 2017



Most respondents felt that GPs restrictiveness on transfers did not change in H1 2018 compared to H1 2017.

Select respondents

50South Capital
Aberdeen Standard Investments
Access Capital
Adams Street Partners
Adveq
AlpInvest Partners
Altamar Capital
Ant Capital Partners
Arcano Group
Argentum
Bex Capital
Canada Pension Plan
Capital Dynamics
CBRE
Central Park Group
Coller Capital
Commonfund Capital
Corbin Capital Partners
Dorchester Capital
Euro Private Equity
Fort Washington
GCM Grosvenor
Glouston Capital Partners
Golding Capital Partners
Greenspring Associates
Hamilton Lane Advisors
HarbourVest Partners
Headlands Capital
Hollyport Capital
Intermediate Capital Group (ICG)
Industry Ventures
International Woodland Company
Israel Secondary Fund
Jasper Ridge
JP Morgan
Knightsbridge
Landmark Partners
Mantra Investments

Mercury Partners
Metropolitan Real Estate
Morgan Stanley Investment Management
Neuberger Berman
New 2ND Capital
Newbury Partners
NewQuest Capital Partners
North Sky Capital
Northleaf Capital
Optimize Capital Partners
Pantheon
Partners Group
Pathway Capital
Pictet Alternative Advisors SA
PineBridge Investments
Pomona Capital
Portfolio Advisors
Private Advisors
RCP Advisors
ROC Partners
Sobera Capital
Spectra Investments
Stafford Capital Partners
Stepstone
Strategic Partners Fund Solutions
Sweetwater Capital
Top Tier Capital Partners
TR Capital
Tyrus Capital
UBS Asset Management
Unigestion
Vintage Ventures
Warana Capital
Whitehorse Liquidity
Willowridge Partners

About Setter

Established in 2006, Setter Capital is a leading independent advisory firm specializing in providing liquidity solutions for fund managers and institutional investors in the secondary market for alternative investments. We serve a diverse institutional client base including some of the world's largest pensions, endowments, investment consultants and fund managers. To date, Setter Capital has completed over 400 transactions, representing more than \$20 billion in liquidity across venture capital, private equity, infrastructure, real estate, real asset, and hedge fund investments.

Setter Capital's mission is to make the secondary market more transparent and efficient for all market participants. To this end, Setter provides the market with complimentary secondary market research and analytical tools such as:

The Setter Liquidity Rating™ A unique rating system that allows buyers, sellers and creditors to assess the relative liquidity of over 7000 different fund families.

The Setter Volume Report™ and the Setter Price Report™
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