

Setter

Volume Report H1 2017

First in the Secondary Market.

Highlights

The Setter Capital Volume Report analyzes global secondary market activity in H1 2017 and covers the following topics:

- › Total Volume of Secondary Deals
- › Secondary Volume H1 2017 vs. H1 2016
- › 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 H2 2017
- › Changes in the Level of Competition
- › Changes in Debt Levels
- › Expected Returns of Secondary Purchases
- › Expected Distribution and NAV Changes in H2 2017
- › 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 2017? 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 2017. 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 2017. Please note the '\$' sign denotes USD throughout this report.

We were pleased by the high response rate – of the 138 most active and regular buyers in the secondary market, 86 agreed to share their confidential results (see partial list of participants). Given the high response rate and the fact that nine of the ten largest buyers participated, the respondents to our survey represented 83.3% 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 2017 in review


After slumping to 42.2 billion in FY 2016, the secondary market rebounded as the total volume of completed transactions increased to \$29.1 billion in H1 2017, rising 56.3% from the volume recorded in the **Setter Capital Volume Report H1 2016**.

Volume was up across almost all alternative asset classes. The private equity secondary market (funds and directs) increased 58.8% year over year, to a total of \$24.3 billion. Real estate secondaries (funds and directs) were up 78.9% to \$3.2 billion and hedge fund secondaries were up 19.5% to \$.49 billion. Private equity fund secondaries were up 74.1% (\$17.4 billion in H1 2017 from \$10.0 billion in H1 2016), driven by the strong market for both LBO funds (up 73.1%) and VC funds (up 43.7%). Other noteworthy bright spots include the significant rise of fund of fund secondaries which increased 289.4% (\$627 million in H1 2017 from \$161 million in H1 2016). Energy fund secondaries also increased substantially by 163.3% (\$882 million in H1 2017 from \$335 million in H1 2016) and private debt secondaries growth continued by 16.5% (\$649 million in H1 2017 from \$557 million in H1 2016).

Traditional fund secondaries were up 71% from \$12.5 billion in H1 2016 to \$21.38 billion in H1 2017 and 'direct secondaries' increased by 26.07% from 6.1 billion to \$7.7 billion (private equity directs were \$6.9 billion and real estate directs were \$779 million). Indeed, 44.3% of the survey respondents felt that meaningfully more GPs attempted to liquidate or restructure older funds in H1 2017 as compared to H1 2016 and 30.3% of respondents felt that a materially higher number of GPs had sought staples in H1 2017 as compared to H1 2016.

While the breadth and number of buyers continued to increase, the most significant activity was driven by the large buyers in the market. The ten largest buyers, defined as those that deployed more than \$600 million in H1 2017, accounted for 61.9% of the market's total volume (vs. 57.1% in H1 2016), driven largely by the increase in larger portfolios to transact and the pent up dry powder of the big players. 29 mid-sized buyers accounted for roughly 25.6% (vs. 31.7% in H1 2016) and 99 small buyers represented roughly 12.5% (vs. 11.1% in H1 2016). Buyers continued to diversify their secondary focus with about 17.9% 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 2017 as noted by 31% of respondents who felt it was significantly higher than last year (vs. only 2.4% 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 29.5% of respondents felt that buyers had used significantly more leverage in H1 2017 as compared to the prior year, and not a single respondent felt buyers used less leverage.

The level of intermediation increased from 56.2% in H1 2016 to 59.9% of total secondary volume (\$29.1 billion) in H1 2017. We expect the level of intermediation to continue 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 874 transactions in H1 2017, with an average size of approximately \$33.3 million. The number of transactions was up 67.1% from the 523 transactions completed in H1 2016, while the average deal size decreased 6.5%.

The ranks sellers continued to grow as more institutions look to actively manage their private market portfolios. Managers of funds across buyout, VC, hedge funds, fund of funds and secondary funds were the most active sellers, accounting for 41.8% of all sellers, as they continued to use the market to drive liquidity in their funds. Pensions only accounted for 15.4% of H1 2017 volume, down from 36.3% in H1 2016, while endowments and charities accounted for 14.1%, up from 4.9% YoY. Looking forward, most buyers expect pensions to be much more active sellers in H2 2017 (37.7% of total transaction volume).

From a geographical perspective, North American sellers accounted for the largest proportion of volume in H1 2017 selling \$11.8 billion (44.8% vs. 55.8% in H1 2016), whereas Western European sellers sold \$10 billion (34.2% vs. 30.8% in H1 2016) and Asia-Pacific sellers accounted for about \$2.9 billion (10.1% vs. 9.7% in H1 2016) year over year.

Buyers, whose expertise is modeling near and midterm fund performance, estimated NAV valuations would increase 11.52% in H2 2017, while the pace of distributions would increase 0.59%. These forecasts are more optimistic than those in the **Setter Capital Volume Report H1 2016**, where most buyers expected distributions to be flat and NAV valuations to decrease by 4.0%. Interestingly, other geographies such as the Middle East accounted for 10.8% of the total volume in H1 2017, up significantly from 3.8% in H1 2016.

Looking forward, buyers expect FY 2017 volume to be \$55.7 billion, which would be up 32% from the \$42.2 billion transacted in H1 2017. This is even more optimistic than what buyers expected in H1 2016 (**Setter Capital Volume Report H1 2016**), when they expected the volume growth to be 25.5% in the coming year.

More Insight.

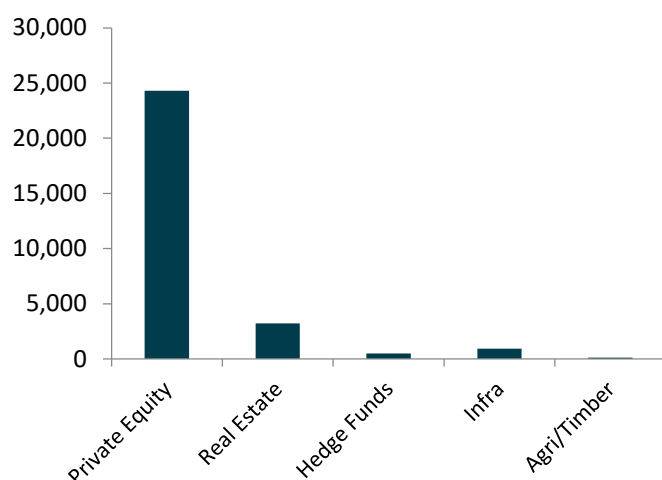
In the secondary market, knowledge is power.
By providing granular custom portfolio analysis and
industry-leading market research, we empower our
clients to make the most informed decisions.

Setter

Total volume

Total secondary market volume for H1 2017 was \$29.1 billion. This is the volume estimate of the 138 secondary buyers surveyed with dedicated secondary efforts and includes 68 secondary funds, 51 funds of funds, 9 hedge funds, 8 investment consultants, 1 family office and 1 pension. We believe this estimate is reliable as the 86 survey respondents alone reported \$24.2 billion in 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): \$24.3 billion
(58.8% increase YoY)

Real Estate (Directs & Funds): \$3.2 billion
(78.9% increase YoY)

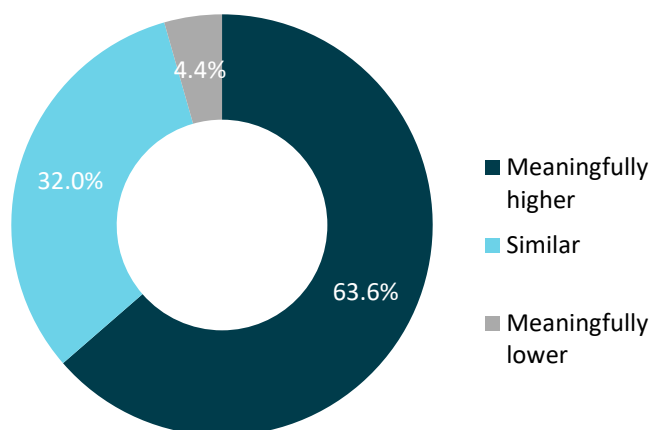
Hedge Funds: \$490 million
(19.5% increase YoY)

Infrastructure Funds: \$946 million
(10.0% increase YoY)

Agri/Timber Funds: \$113 million
(49.6% decrease YoY)

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

H1 2017 volume vs. H1 2016 volume

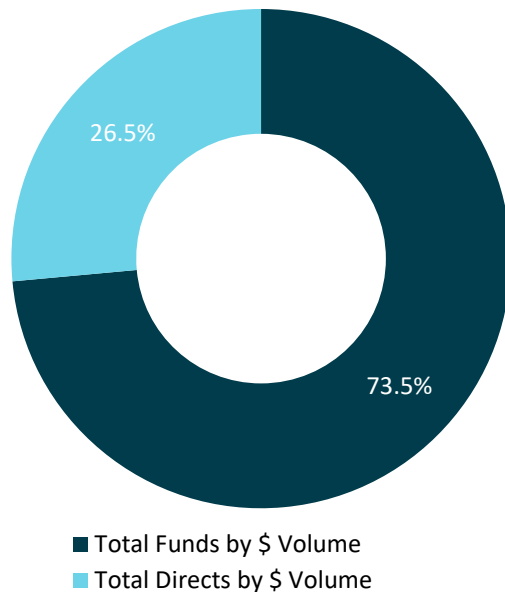


H1 2017 volume increased 56.3% compared to H1 2016, which was \$18.6 billion.

63.6% of survey respondents felt volume was significantly higher while only 4.4% felt it was significantly lower.

Assets purchased

Funds vs. Directs



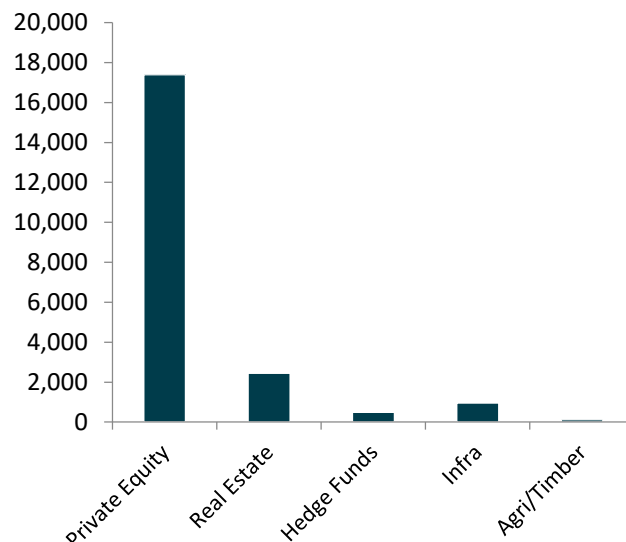
In H1 2017, \$21.4 billion of funds (73.5%) and \$7.7 billion of directs (26.5%) were purchased.

Fund secondaries increased 71% in H1 2017, from \$12.5 billion recorded in H1 2016. Secondaries of direct investments¹ increased from \$6.1 billion in H1 2016 to \$7.7 billion in H1 2017, which represents a 26.1% increase. Private equity directs and real estate directs accounted for 89.9% and 10.1% respectively of the total directs volume.

Survey respondents estimated that the split between fund and direct secondaries in 3 years would be 70.6% funds and 29.4% directs, respectively.

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 \$17.4 billion (74.1% increase YoY)

Real estate fund purchases totaled \$2.4 billion (134.6% increase YoY)

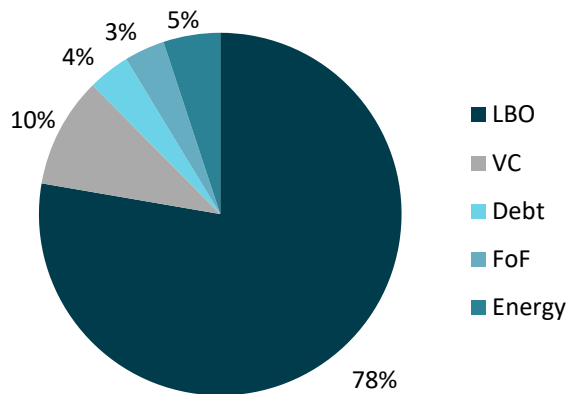
Hedge fund purchases totaled \$490 million (19.5% increase YoY)

Infrastructure fund purchases totaled \$946 million (10.0% increase YoY)

Agri/Timber fund purchases totaled \$113 million (49.5% decrease YoY)

Types of funds purchased

Private Equity Funds



LBO – \$13.5 billion
(Up 73.1% YoY from \$7.8billion)

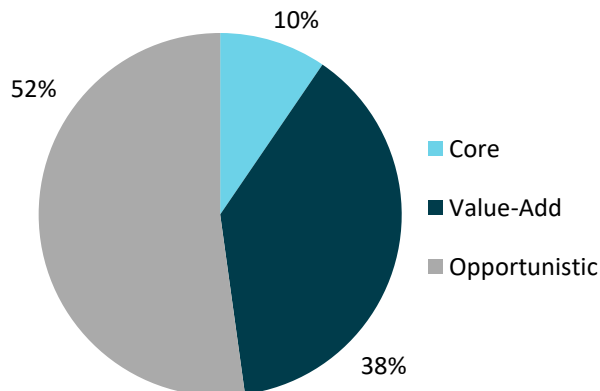
VC – \$1.7 billion
(Up 42.5 % YoY from \$1.2 billion)

Debt – \$649 million
(Up 16.3% YoY from \$557 million)

Fund of Funds – \$627 million
(Up 289.4% YoY from \$161 million)

Energy – \$ 882 million
(Up 163.3% YoY from \$335 million)

Real Estate Funds

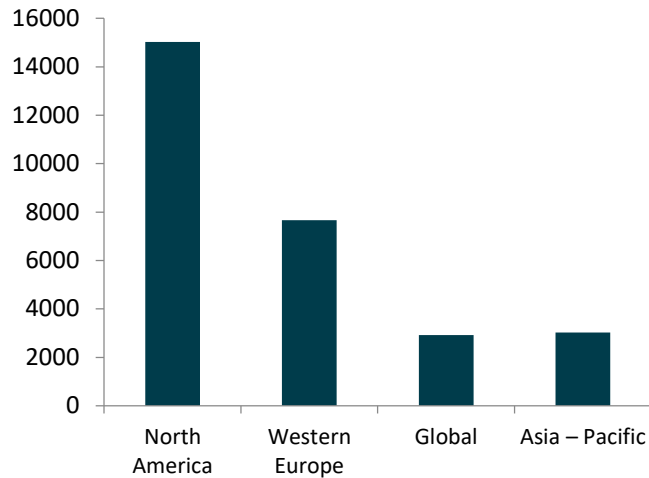


Core – \$233 million
(Down 26.1% YoY from \$314 million)

Value-Add – \$936 million
(Up 176.6% YoY from \$338 million)

Opportunistic – \$1.3 billion
(Up 232.0% YoY from \$384 million)

Geography of assets purchased



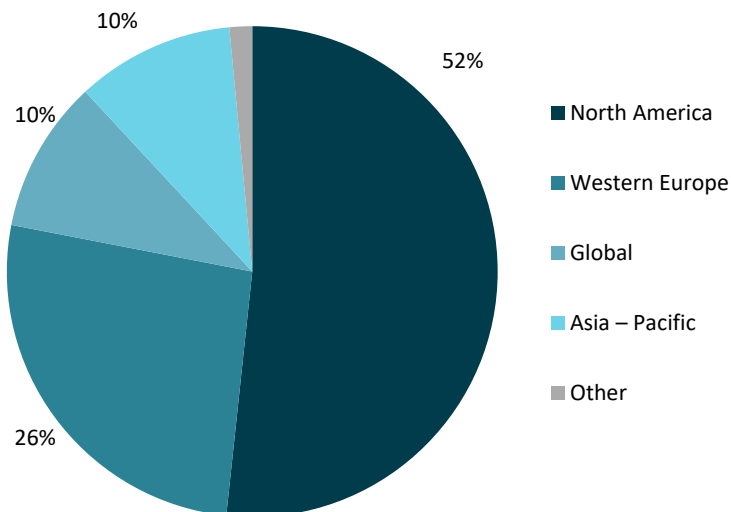
North American and Western European focused funds/directs accounted for the vast majority of assets purchased in H1 2017:

North America – \$15 billion
(Up 47.3% YoY from \$10.2 billion)

Western Europe – \$7.7 billion
(Up 59.6% YoY from \$4.8 billion)

Global – \$2.9 billion
(Up 21.7% YoY from \$2.4 billion)

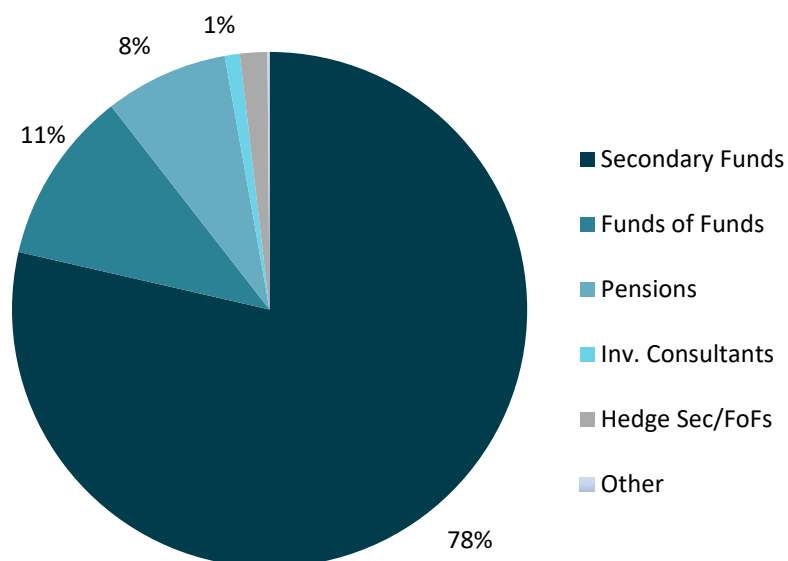
Asia-Pacific – \$3 billion
(Up 228.3% YoY from \$922 million)



In terms of percentage, North America focused funds and directs accounted for 51.7% of total volume, Western European funds and directs accounted for 26.4% and Asia-focused funds and directs accounted for 10.4% of sales.

Profiles of buyers

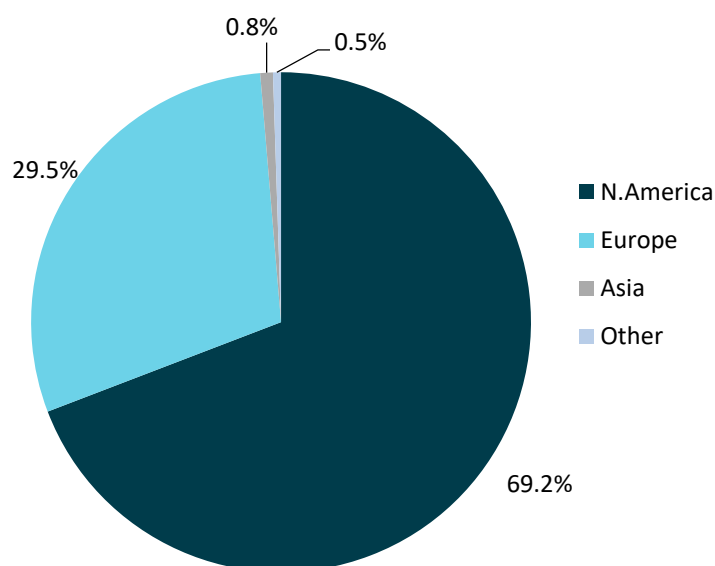
Type of buyers



Secondary funds were the most active buyers in H1 2017, accounting for 78.6% (\$22.9 billion) of total purchases, while funds of funds accounted for 10.9% (\$3.2 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 (69.2% of total volume) in H1 2017, up from 60% of total volume in H1 2016.

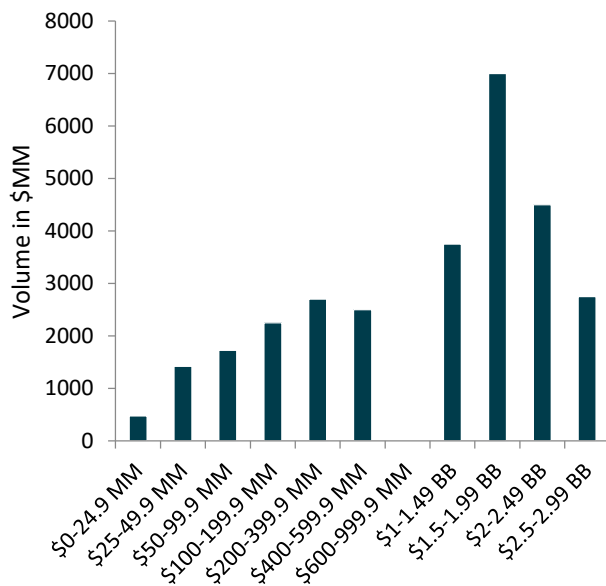
European buyers accounted for 29.5% of total volume in H1 2017, which was lower than H1 2016 (38.1%).

¹ Location is based on head office location.

Activity levels of small, medium and large buyers

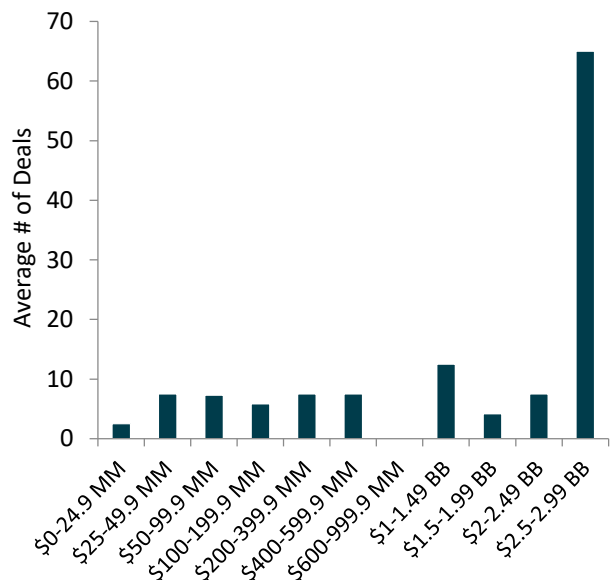
Applying the survey respondents' dollar volume and transaction numbers, while taking into consideration the proportion of small, medium and large buyers that did not participate, we estimated the market share of small, medium and large buyers as follows:

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

10 large buyers (defined as those that deployed \$600 million or more in H1 2017) purchased \$18.0 billion, representing approximately 61.9% of total volume across 144 transactions with an average deal size of \$125 million. This was an increase from H1 2016, where large buyers accounted for 57.1%.

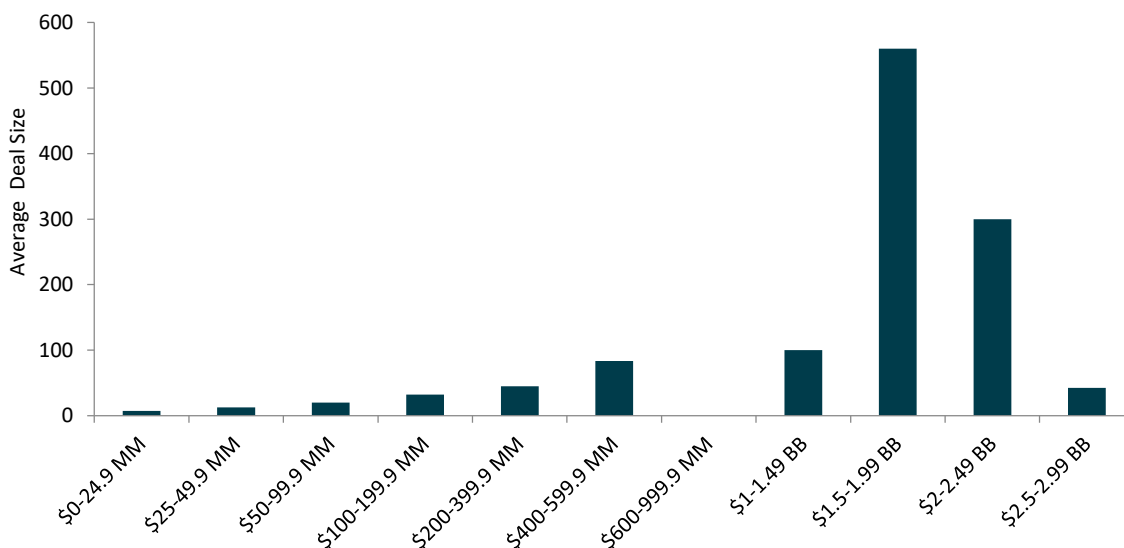
29 medium sized buyers (defined as those that deployed \$100 to \$600 million in H1 2017) purchased \$7.5 billion, representing approximately 25.6% of total volume across 192 transactions with an average deal size of \$38.8 million. This was a decrease from H1 2016, where they accounted for 31.7%.

99 small buyers (defined as those that deployed less than \$100 million in H1 2017) purchased \$3.6 billion, representing approximately 12.5% of total volume across 537 transactions with an average deal size of \$6.8 million. This was an increase from H1 2016, where they accounted for 11.1%.

Number of deals and average size deal

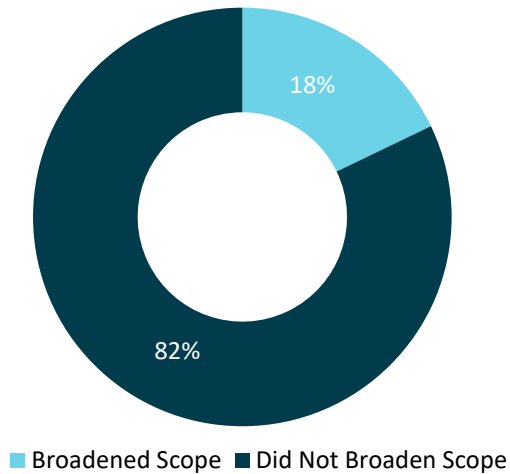
Buyers completed 874 transactions in H1 2017 across the entire secondary market for alternative assets, with an average size of approximately \$33.3 million. The number of transactions increased 67.1% from 523 transactions in H1 2016 and the average deal size decreased 6.5% from \$35.6 million in H1 2016.

Average deal size by size of buyer



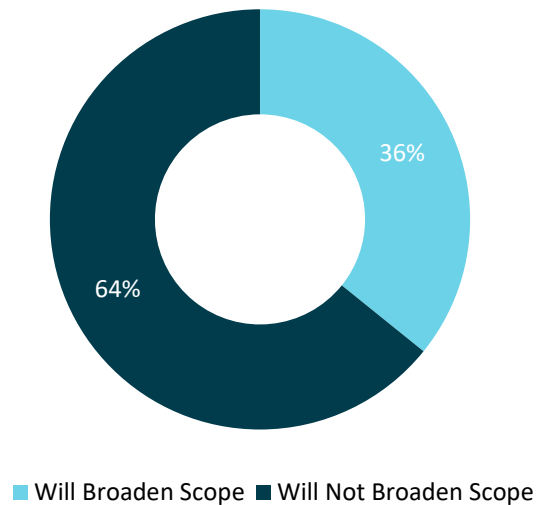
Buyers' scope of interest

Buyers that broadened their focus in H1 2017



Approximately 17.9% of participants broadened their secondary focus in H1 2017 to include buying other alternative investment types (e.g. infrastructure, real estate, direct secondaries, etc.).

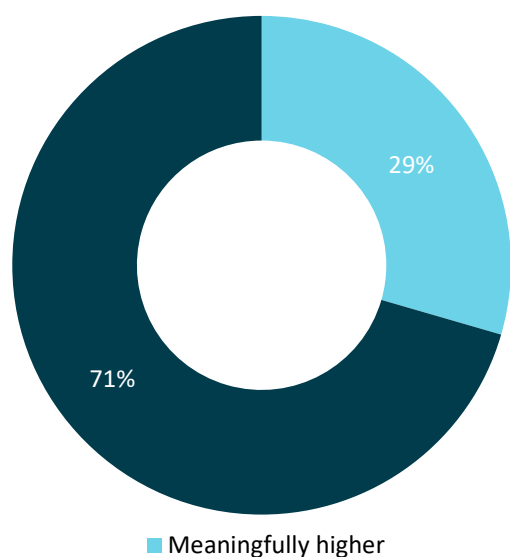
Buyers that intend to broaden their focus in H2 2017



Approximately 35.8% of participants plan to broaden their secondary focus in H2 2017 to include buying other alternative investment types.

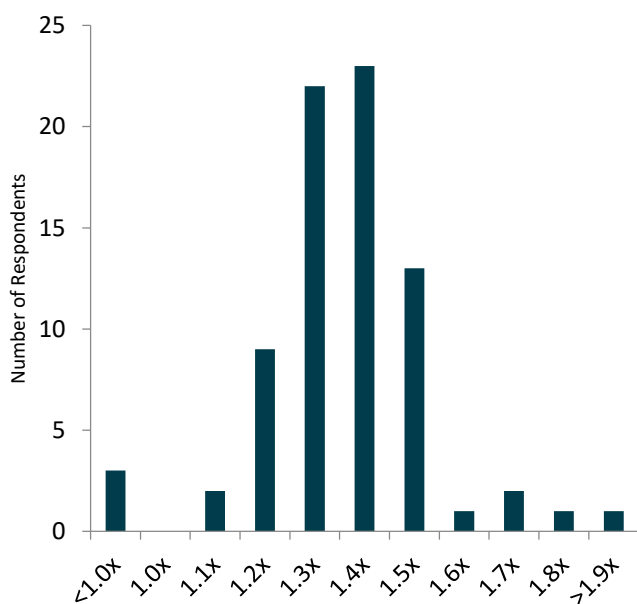
Leverage and returns

Level of debt used by buyers in H1 2017 vs. H1 2016



29.5% of respondents believed the level of debt used by buyers had increased significantly in H1 2017. 70.5% felt it was the same and no respondents felt it was less.

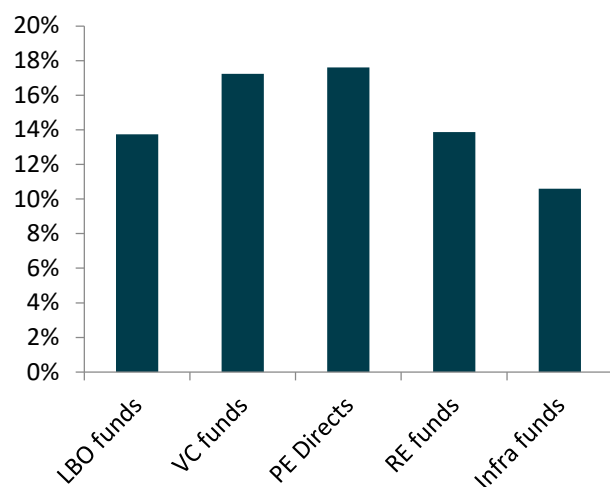
Expected multiple for secondary deals completed in H1 2017



Respondents predicted that the average gross multiple for secondary deals completed in H1 2017 would be 1.36x, which was slightly down from the 1.39x buyers expected in H1 2016.

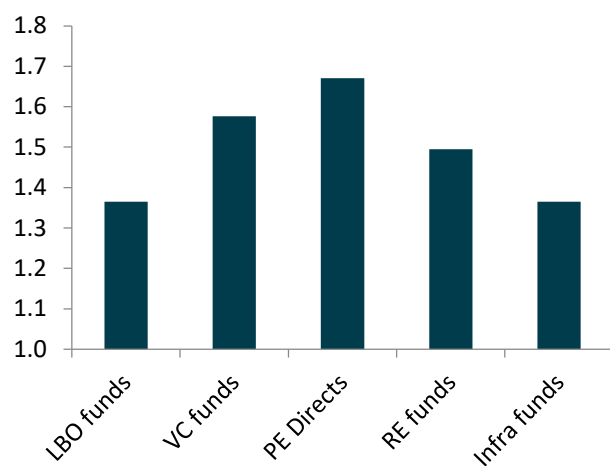
Buyers' return targets

Targeted IRRs on secondary purchases



When underwriting new purchases, the 86 survey respondents estimated their peers' average targeted IRR to be 13.7% for LBO funds, 17.2% for VC funds, 17.6% for PE direct, 13.9% for real estate funds and 10.6% for infrastructure funds.

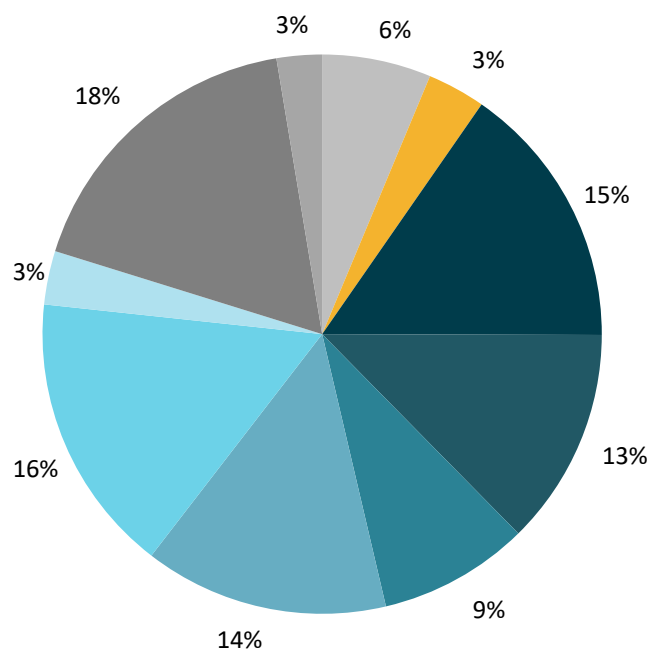
Targeted multiples on secondary purchases



On average, the 86 buyers estimated their peers' targeted multiples to be 1.37x for LBO funds, 1.58x for VC funds, 1.67x for PE direct, 1.49x for real estate funds and 1.37x for infrastructure funds.

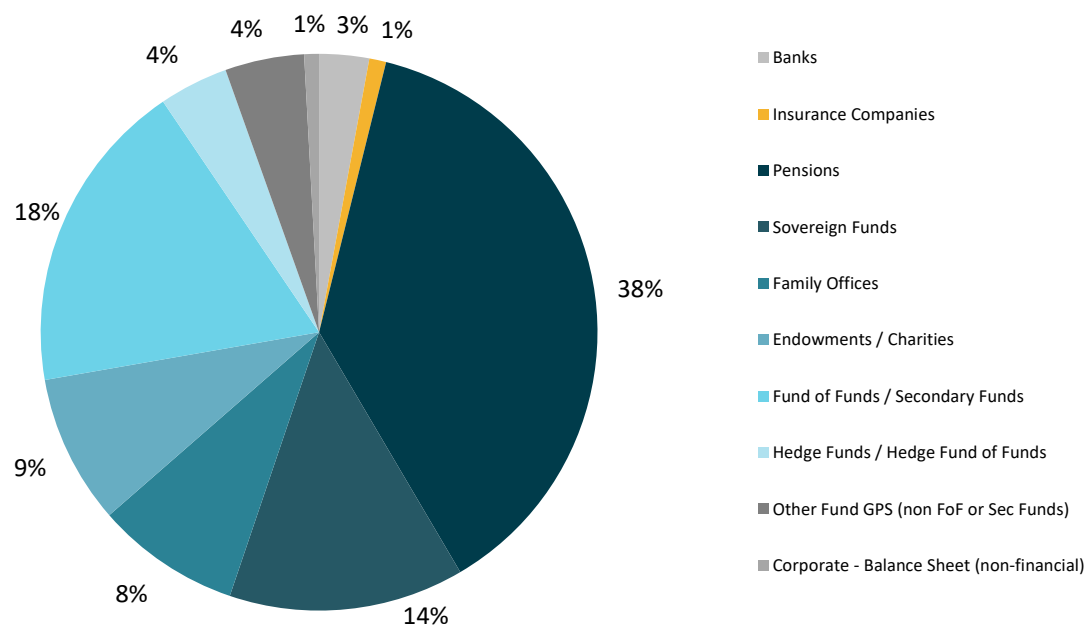
Seller profiles

Type of sellers in H1 2017



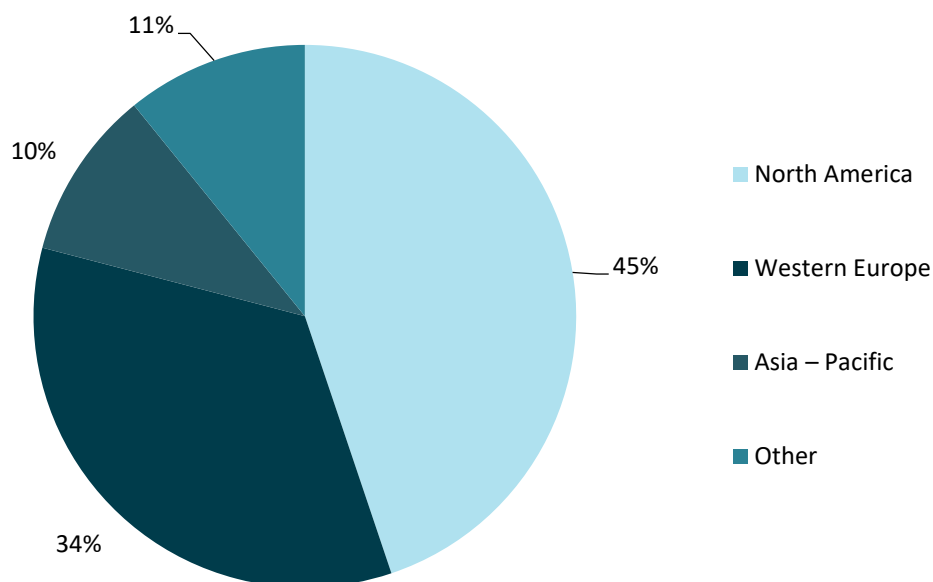
Non-secondary fund and fund of fund GPs, were the most active sellers in H1 2017 making up 17.6% of volume. Most buyers expect pensions to be the biggest sellers in H2 2017 (37.7% of total transaction volume).

Expected sellers in H2 2017

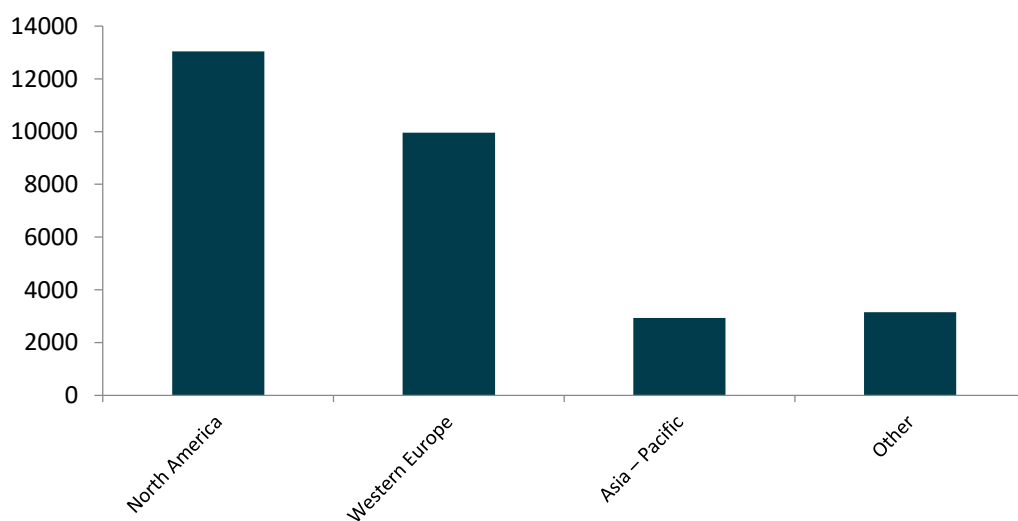


Seller location

Geography of sellers

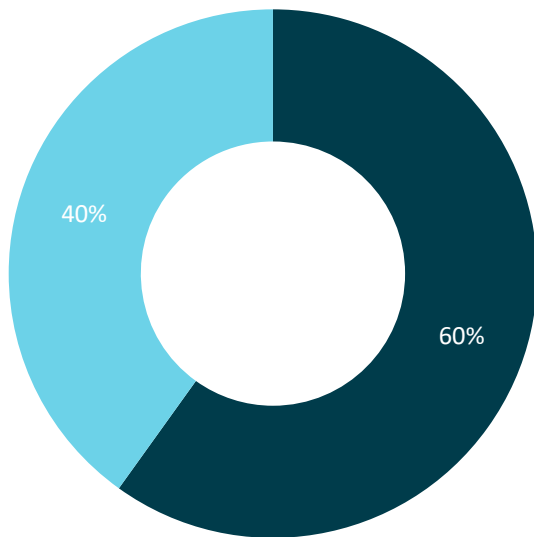


In terms of the location of sellers, North American and Western European sellers accounted for the vast majority of volume in H1 2017. North American sellers sold \$13.0billion (44.8% vs. 55.7% in H1 2016), whereas Western European sellers sold \$9.6billion (34.2% vs. 30.7% in H1 2016). Asia-Pacific sellers accounted for 10.1% of the total volume up from 9.8% in H1 2016. Interestingly, other geographies such as the Middle East accounted for 10.8% of the total volume in H1 2017, up significantly from 3.8% in H1 2016.



Intermediation and level of competition

Volume of intermediated transactions

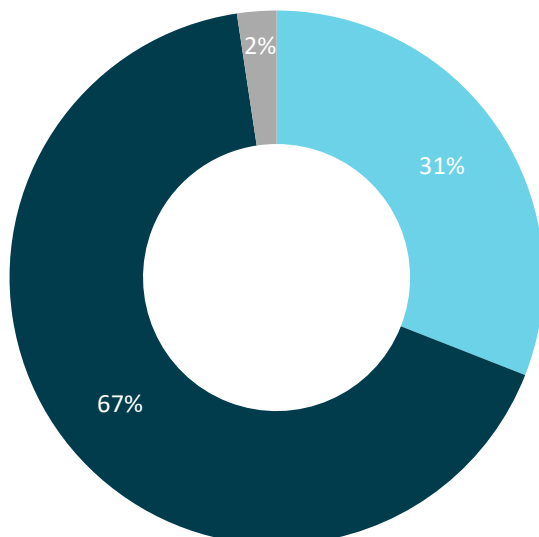


■ Total Volume Involving Intermediary
■ Total Volume Not Involving Intermediary

Approximately 59.9% (\$17.4billion) of total secondary volume involved an intermediary, on either the buy or sell-side, as compared to 56.2% in H1 2016.

In terms of volume, agents intermediated \$6.9 billion more in deals, an increase of 65.9% over H1 2016.

Buyer competition for deals in H1 2017 vs. H1 2016

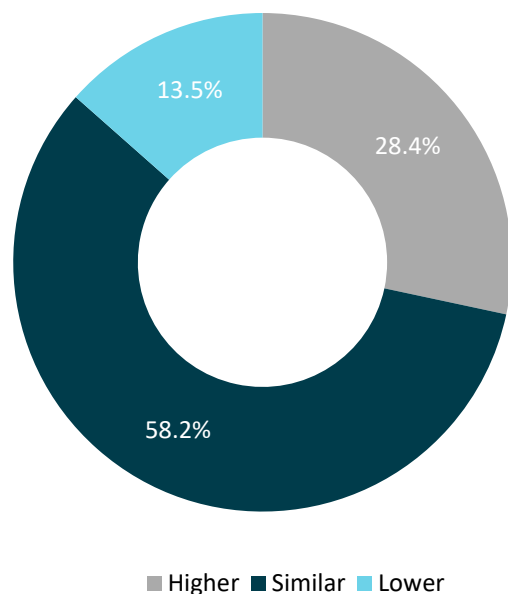


■ Higher ■ Similar ■ Lower

66.7% of respondents felt buyer competition in H1 2017 was similar to H1 2016, while 31% felt buyer competition was significantly higher. Only 2.4% felt buyer competition was lower in H1 2017.

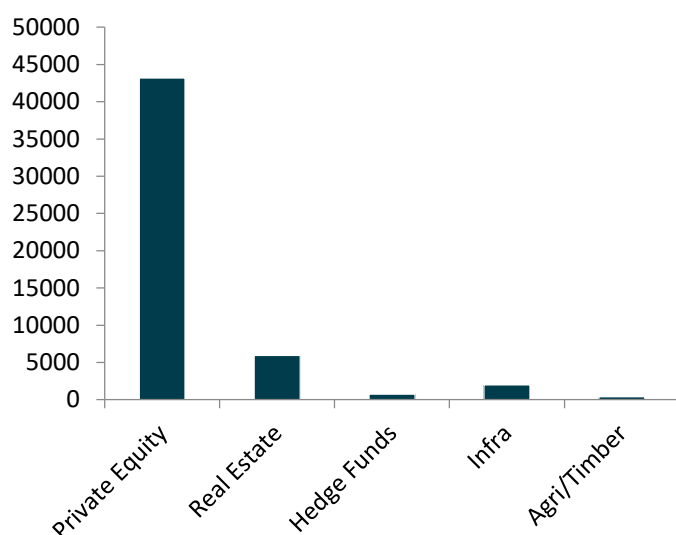
Projected volume for H2 2017

How H2 2017 volume will compare to H1 2017



58% of respondents felt that H2 2017 volume will be similar to that of H1 2017 as 28% of respondents felt that it will be meaningfully higher and 14% felt that it will be meaningfully lower.

Predicted volume for H2 2017

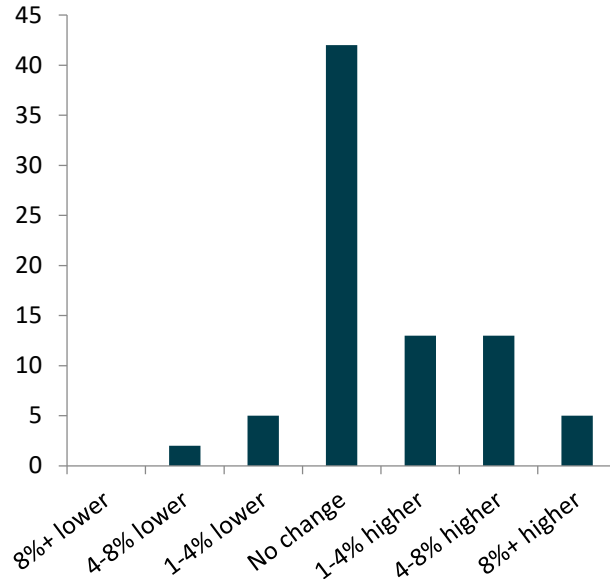


Respondents predicted total volume for FY 2017 to be \$55.7 billion, which would represent a 32.15% increase from the \$42.2 billion transacted in FY 2016.

Assuming proportions do not change in H2 2017, this suggests private equity volume will be \$46.5 billion in 2017, real estate will be \$6.2 billion, hedge funds will be \$938 million, infrastructure will be \$1.8 billion and agriculture & timber will be \$216 million.

Expected distribution and NAV changes in H2 2017

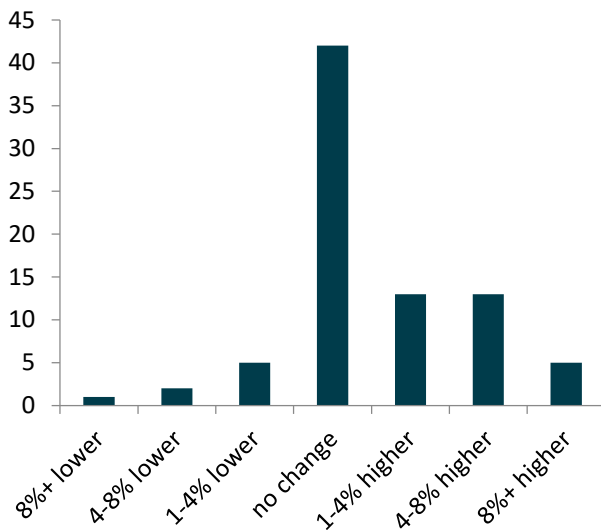
Distribution Pace in H2 2017 vs. H1 2017



Most respondents expect the pace of distributions in H2 2017 to be approximately the same as H1 2017 as the average response data suggests an expected increase of only .59% in H2 2017.

Respondents were, however, more optimistic than they were in H1 2016, when they expected the pace of distributions to be flat.

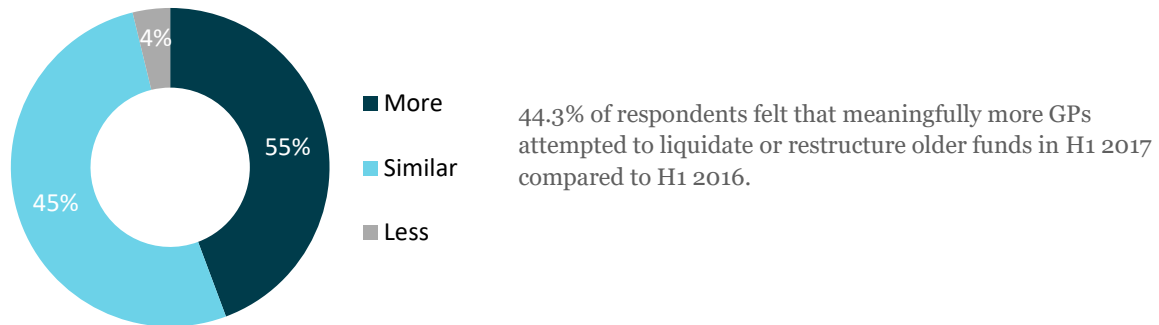
Change in NAV in H2 2017 vs. H1 2017



On average, respondents expect NAV valuations to increase by 1.52% in H2 2017 compared to H1 2017. This suggests that respondents are more optimistic than they were in H1 2016 when they expected NAVs to decrease by 4% in the coming half year.

General partners' approach to the secondary market

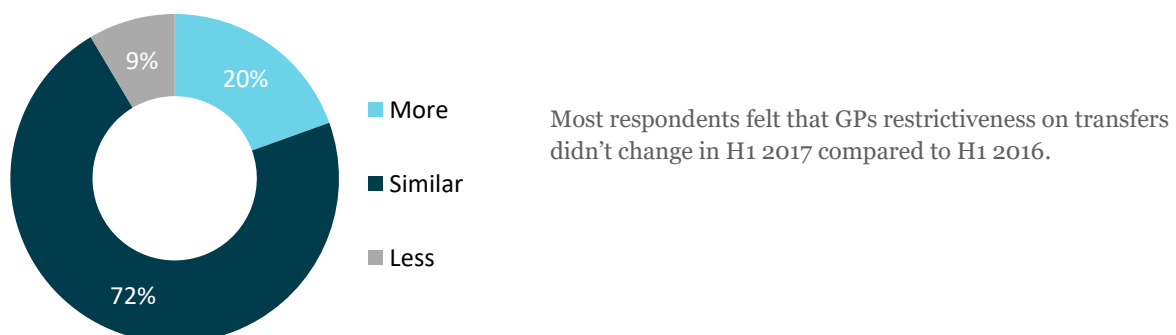
Liquidations and restructurings in H1 2017 vs. H1 2016



Staples sought by GPs in H1 2017 vs. H1 2016



GP restrictiveness on transfers in H1 2017 vs. H1 2016



Select respondents

50South Capital
Adams Street Partners
Adveq
AlpInvest Partners
Altamar Capital
Ant Capital Partners
Arcano Group
BBR Partners
BEX Capital
Canada Pension Plan
Capital Dynamics
Central Park Group
Cipio Partners
Coller Capital
Commonfund Capital
Corbin Capital Partners
DB Private Equity
Dorchester Capital
Fort Washington
GCM Grosvenor
Glenmede Trust
Golding Capital Partners
Greenspring Associates
Hamilton Lane Advisors
HarbourVest Partners
Headlands Capital
Hollyport Capital
HQ Capital
Idinvest
Industry Ventures
International Woodland Company (IWC)
Jasper Ridge
JP Morgan
Klinehill Partners
Knightsbridge
Landmark Partners
LGT Capital

Metropolitan Real Estate
Neuberger Berman
New 2ND Capital
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
SL Capital Partners
Spectra Investments
Sobera Capital
Stafford Capital Partners
Stepstone
Strategic Partners Fund Solutions
Sturbridge Capital
SwanCap Partners
Sweetwater Capital
Top Tier Capital Partners
TR Capital
Tyrus Capital
UBS Global Asset Management
Vintage Ventures
Vision Capital
W Capital Partners
Whitehorse Liquidity
Warana Capital
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™
Two semi-annual reports that provide the most comprehensive and accurate assessments of the secondary market. Data is based on pricing of over 2000 funds and a survey of over two thirds of the most active secondary buyers globally.

SecondaryLink.com™ A professional network where over 5000 institutional LPs and GPs connect on primary due diligence and the secondary market.

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