



Comparative Asset Allocation: Private Clients

December 31, 2016

CAMBRIDGE  ASSOCIATES

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Geoffrey Bollier | Elizabeth Cheever

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Data Collection

Included in this analysis are 184 investment portfolios representing 108 US-based private clients that received performance reporting services from Cambridge Associates as of December 31, 2016. The average market value of participating private client investment pools is \$252.8 million, and the median market value is \$82.4 million as of December 31, 2016. The notation of n denotes the number of private clients included in each analysis.

Asset Allocation Methodology

Asset allocation is generated using the investment manager structure for each client. Every investment product, fund, and vehicle that a client is invested in is assigned an asset class. Asset classes for a given investment product, fund, or vehicle are maintained across all clients to ensure comparability. The statistics throughout this analysis are calculated on an equal-weighted basis.

Global portfolios are broken out into US, developed, and emerging markets equities. In cases where the underlying holdings are not available to Cambridge Associates for a particular global portfolio, a 50% US/50% developed markets allocation is reflected.

Legacy holdings that a client still maintains as part of its investment pool can be included in this analysis. These long-held securities can fall under several categories including, but not limited to, securities with a very low tax basis or securities that the owner does not intend to sell for personal reasons.

In Exhibits 1, 3, and 4, bonds includes US bonds, global ex US bonds, and high-yield bonds; hedge funds includes long/short hedge funds and absolute return (ex distressed securities); private equity and venture capital includes non-venture private equity, venture

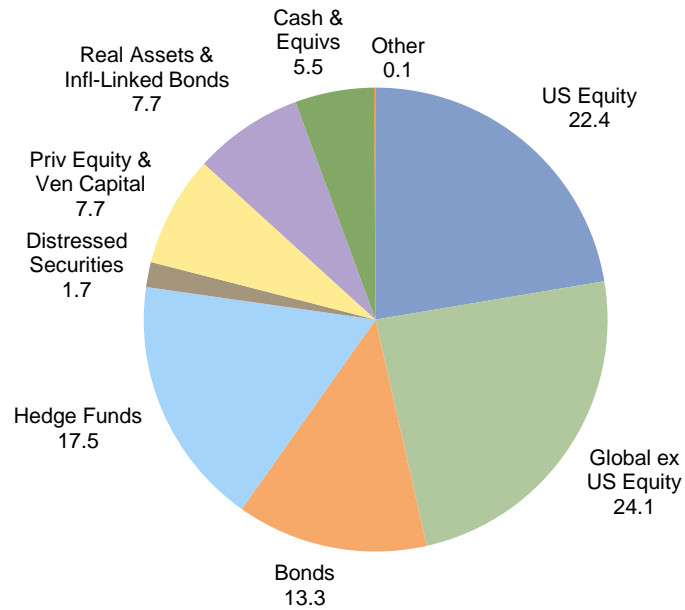
capital, and other private investments; and real assets and inflation-linked bonds includes public and private real estate, commodities, inflation-linked bonds, private oil & gas/natural resources, timber, and public energy/natural resources.

Peer Grouping

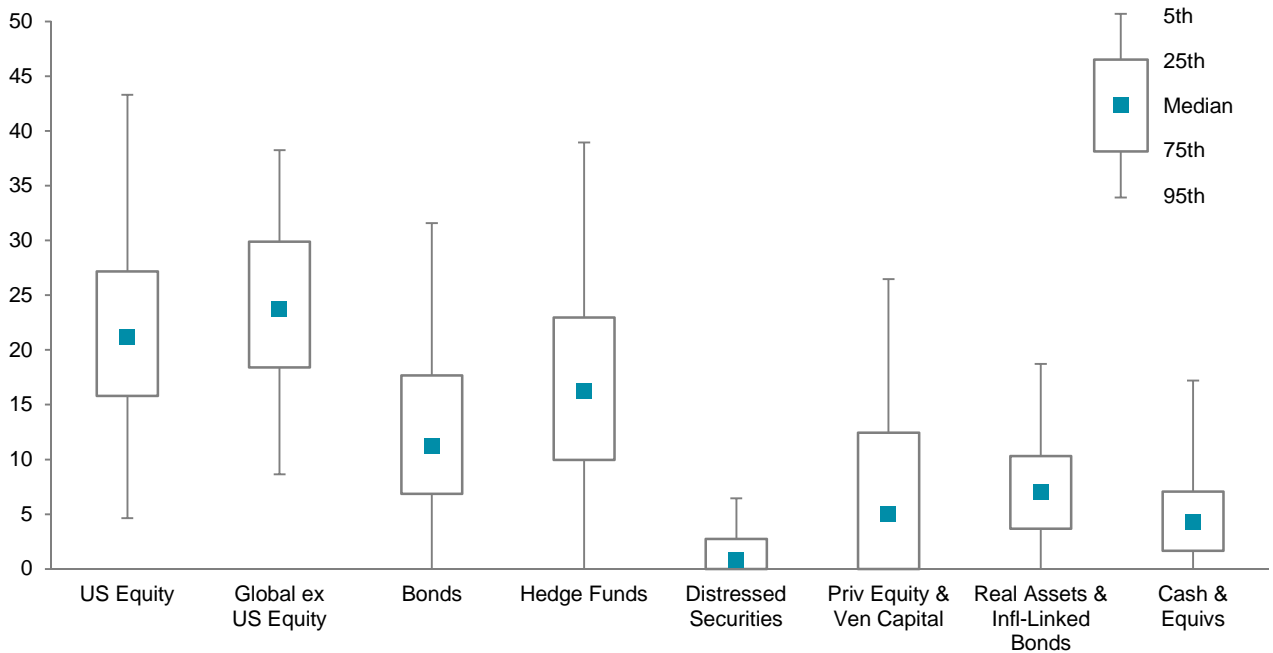
The Cambridge Associates endowments and foundations universe includes colleges and universities, cultural & environmental institutions, health care institutions, independent schools, and other endowed nonprofit institutions as well as foundations. ■

Exhibit 1
Asset Allocation Snapshot: US Private Clients
 As of December 31, 2016 • Percent (%)

Mean Asset Allocation (n = 184)



Distribution by Asset Class: Asset Allocation (n = 184)



Source: Private client data as reported to Cambridge Associates LLC.
 Note: Percentages may not total due to rounding.

Exhibit 2
Detailed Asset Allocation by Asset Size: US Private Clients

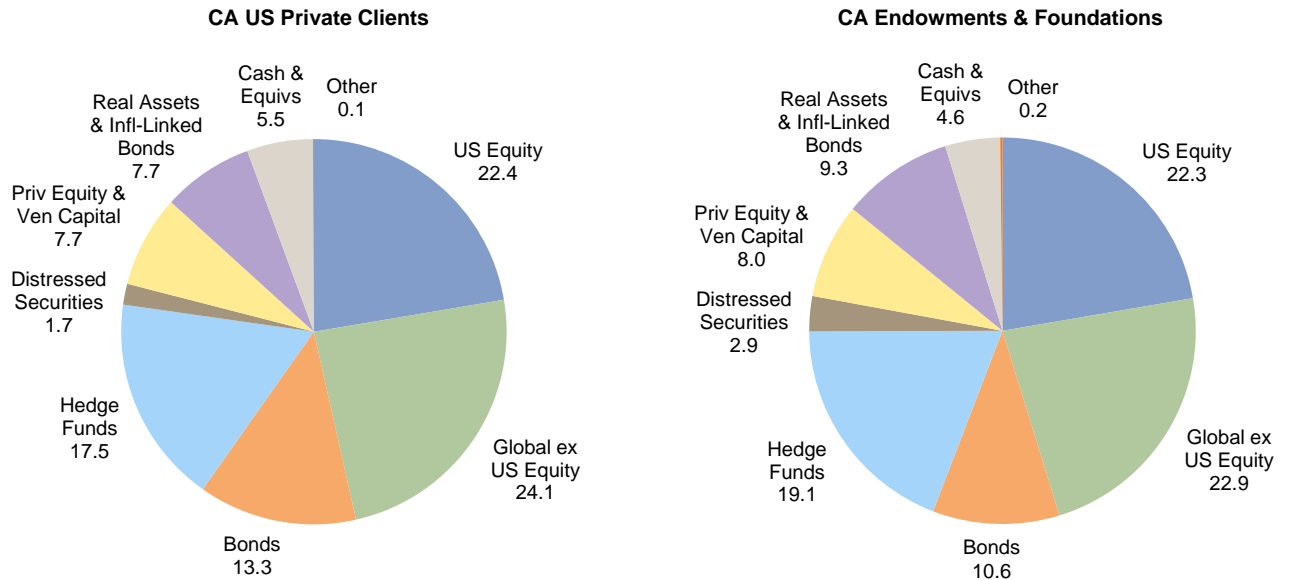
As of December 31, 2016 • Percent (%)

	All CA US Private Clients (n = 184)		Under \$100mm (n = 97)		\$100mm to \$500mm (n = 57)		Over \$500mm (n = 30)	
	Mean	Median	Mean	Median	Mean	Median	Mean	Median
US Equity	22.4	21.2	21.5	21.6	20.9	19.9	27.8	23.4
Global ex US Equity	24.1	23.7	23.7	24.7	24.1	22.3	25.5	26.6
Developed Markets	16.7	16.1	16.6	16.5	16.6	15.1	17.3	16.5
Emerging Markets	7.4	7.1	7.1	7.0	7.5	7.0	8.1	8.8
Bonds	13.3	11.2	15.8	13.6	12.0	11.1	7.8	7.6
US Bonds	12.7	10.9	15.1	13.1	11.4	10.6	7.4	7.0
<i>Municipal Bonds</i>	9.5	8.5	12.4	10.8	7.3	6.5	4.5	1.4
<i>Taxable Bonds</i>	3.2	0.0	2.7	0.0	4.1	0.4	3.0	0.1
Global ex US Developed Markets	0.1	0.0	0.0	0.0	0.1	0.0	0.1	0.0
Emerging Markets	0.3	0.0	0.3	0.0	0.4	0.0	0.2	0.0
High-Yield Bonds	0.2	0.0	0.3	0.0	0.1	0.0	0.0	0.0
Hedge Funds	17.5	16.2	17.3	15.8	18.9	16.8	15.3	13.4
Long/Short Hedge Funds	7.8	7.1	7.1	6.8	9.5	8.4	6.9	5.2
Absolute Return (ex Distressed)	9.6	7.4	10.2	6.1	9.3	8.7	8.4	6.4
Distressed Securities	1.7	0.8	1.6	0.5	2.0	1.1	1.7	0.8
Hedge Fund Structure	0.9	0.0	1.1	0.0	0.8	0.0	0.5	0.0
Private Equity Structure	0.8	0.0	0.5	0.0	1.2	0.5	1.1	0.0
Private Equity & Venture Capital	7.7	5.0	5.2	1.2	10.0	8.7	11.7	8.1
Non-Venture Private Equity	3.4	1.4	1.8	0.0	4.3	3.2	7.0	4.9
Venture Capital	3.0	0.6	1.7	0.0	4.6	3.6	4.0	1.3
Other Private Investments	1.3	0.0	1.7	0.0	1.0	0.3	0.7	0.0
Real Assets & Infl-Linked Bonds	7.7	7.0	8.4	7.9	7.9	7.8	4.7	3.9
Private Real Estate	1.7	0.0	1.5	0.0	2.6	0.8	1.1	0.0
Public Real Estate	0.4	0.0	0.6	0.0	0.2	0.0	0.0	0.0
Commodities	0.5	0.0	0.6	0.0	0.3	0.0	0.3	0.0
Inflation-Linked Bonds	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0
Private Oil & Gas/Natural Resources	1.1	0.0	0.6	0.0	1.8	1.1	1.5	0.0
Timber	0.2	0.0	0.1	0.0	0.4	0.0	0.0	0.0
Public Energy/Natural Resources	3.8	3.4	5.1	5.0	2.7	2.6	1.7	1.7
Cash & Equivalents	5.5	4.2	6.4	4.3	4.1	3.4	5.4	5.3
Other Assets	0.1	0.0	0.1	0.0	0.0	0.0	0.2	0.0

Source: Private client data as reported to Cambridge Associates LLC.

Note: Percentages may not total due to rounding.

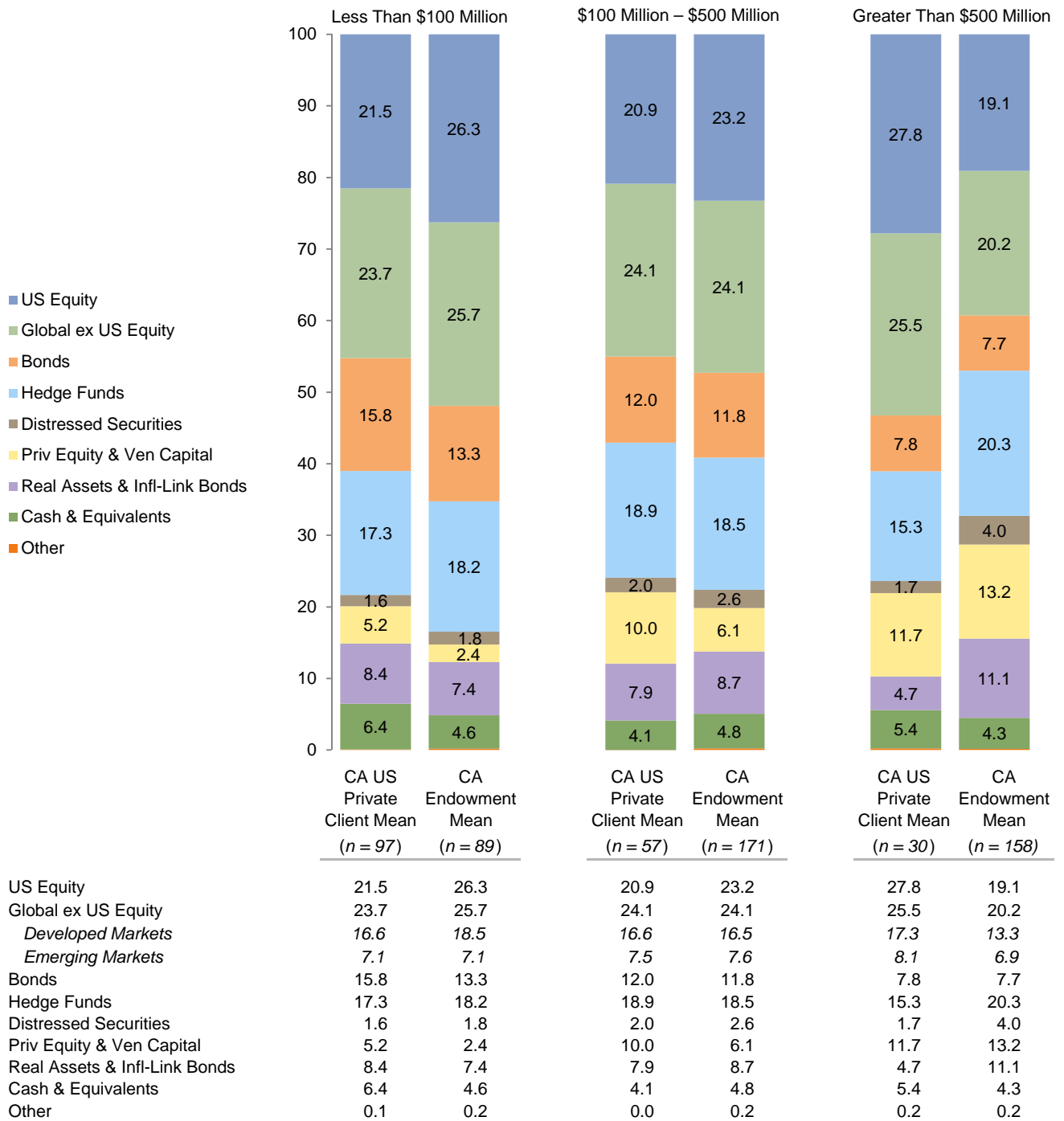
Exhibit 3
Mean Asset Allocation of US Private Clients Compared to Endowments and Foundations
 As of December 31, 2016 • Percent (%)



	CA US Private Clients				CA Endowments & Foundations			
	Mean	Median	Low	High	Mean	Median	Low	High
US Equity	22.4	21.2	0.0	64.4	22.3	22.0	0.0	64.0
Global ex US Equity	24.1	23.7	0.0	47.0	22.9	23.5	0.0	40.6
<i>Developed Markets</i>	16.7	16.1	0.0	41.0	15.7	15.8	0.0	31.1
<i>Emerging Markets</i>	7.4	7.1	0.0	18.4	7.2	7.2	0.0	17.8
Bonds	13.3	11.2	0.0	54.0	10.6	10.0	0.0	41.1
Hedge Funds	17.5	16.2	0.0	100.0	19.1	18.2	0.0	68.7
Distressed Securities	1.7	0.8	0.0	13.5	2.9	2.6	0.0	17.8
Priv Equity & Ven Capital	7.7	5.0	0.0	38.6	8.0	6.6	0.0	37.1
Real Assets & Infl-Linked Bonds	7.7	7.0	0.0	40.8	9.3	9.3	0.0	39.3
Cash & Equivalents	5.5	4.2	-63.1	68.1	4.6	3.7	-1.4	44.4
Other	0.1	0.0	-4.0	10.1	0.2	0.0	-6.6	12.0
Average Market Value	\$252.8 million				\$1.2 billion			
Market Value Range	\$160,000 – \$4.8 billion				\$7.0 million – \$40.3 billion			
Universe	184 Private Clients				418 Endowments			

Source: Endowment, foundation, and private client data as reported to Cambridge Associates LLC.
 Note: Percentages may not total due to rounding.

Exhibit 4
Mean Asset Allocation of US Private Clients by Asset Size Compared to Endowments and Foundations
 As of December 31, 2016 • Percent (%)



Source: Endowment, foundation, and private client data as reported to Cambridge Associates LLC.
 Note: Percentages may not total due to rounding.

Exhibit 5
Detailed Asset Allocation of US Private Clients Compared to Endowments and Foundations
 As of December 31, 2016 • Percent (%)

	CA US Private Clients (n = 184)		CA Endowments & Foundations (n = 418)	
	Mean	Median	Mean	Median
US Equity	22.4	21.2	22.3	22.0
Global ex US Equity	24.1	23.7	22.9	23.5
Developed Markets	16.7	16.1	15.7	15.8
Emerging Markets	7.4	7.1	7.2	7.2
Bonds	13.3	11.2	10.6	10.0
US Bonds	12.7	10.9	9.1	8.9
<i>Municipal Bonds</i>	9.5	8.5	—	—
<i>Taxable Bonds</i>	3.2	0.0	—	—
Global ex US Developed Markets	0.1	0.0	0.5	0.0
Emerging Markets	0.3	0.0	0.5	0.0
High-Yield Bonds	0.2	0.0	0.5	0.0
Hedge Funds	17.5	16.2	19.1	18.2
Long/Short Hedge Funds	7.8	7.1	8.6	7.7
Absolute Return (ex Distressed)	9.6	7.4	10.5	10.2
Distressed Securities	1.7	0.8	2.9	2.6
Hedge Fund Structure	0.9	0.0	1.8	1.4
Private Equity Structure	0.8	0.0	1.1	0.6
Private Equity & Venture Capital	7.7	5.0	8.0	6.6
Non-Venture Private Equity	3.4	1.4	3.6	2.6
Venture Capital	3.0	0.6	3.5	1.8
Other Private Investments	1.3	0.0	0.8	0.0
Real Assets & Infl-Linked Bonds	7.7	7.0	9.3	9.3
Private Real Estate	1.7	0.0	2.0	1.0
Public Real Estate	0.4	0.0	0.5	0.0
Commodities	0.5	0.0	0.8	0.0
Inflation-Linked Bonds	0.0	0.0	0.5	0.0
Private Oil & Gas/Natural Resources	1.1	0.0	2.2	1.5
Timber	0.2	0.0	0.2	0.0
Public Energy/Natural Resources	3.8	3.4	3.2	2.8
Cash & Equivalents	5.5	4.2	4.6	3.7
Other Assets	0.1	0.0	0.2	0.0

Source: Endowment, foundation, and private client data as reported to Cambridge Associates LLC.

Note: Percentages may not total due to rounding.

Absolute Return: The use of different strategies (e.g., global macro, market neutral, open mandate) to produce a positive return regardless of the direction and fluctuation of capital markets. Common techniques include using arbitrage, derivatives, futures, leverage, options, short selling, and unconventional assets.

Bonds (Fixed Income): Includes long-term promissory notes that cannot be exchanged for other assets, government bonds, preferred stocks, structured debt, and derivatives where bonds are the underlying assets. Generally earn interest paid semiannually and are repaid at the principal (par) value. Does not include mortgage real estate.

Cash & Equivalents: Highly liquid, virtually risk-free assets with maturities of less than one year (e.g., certificates of deposit, commercial paper, nonconvertible bonds, and Treasury bills). Manager-held discretionary cash is included in the asset class category for which that manager's strategy is classified (with the exception of multi-strategy funds in which assets are allocated across multiple asset classes).

Commodities: Diversified baskets of fully collateralized, long-only, commodity futures contracts.

Convertible Securities: Bonds or preferred stock that can be exchanged for equities according to terms established by the issuer. Classified as equity.

Developed Markets: Markets within countries that have an established economic infrastructure.

Distressed Securities: Securities of companies that are currently in default, bankruptcy, financial distress, or a turnaround situation.

Emerging Markets: Typically includes countries that have an underdeveloped or developing infrastructure with significant

potential for economic growth and increased capital markets participation by foreign investors.

Emerging Markets Debt: Debt instruments of emerging markets countries and issuers, including USD-denominated and local currency bonds.

Emerging Markets Equity: Equity securities of emerging markets countries; considered emerging even if the equity market is fully functional and well regulated.

Equities: Ownership positions in companies that can be traded in public markets. Often produce current income, which is paid in the form of quarterly dividends. The holders' claims are subordinate to the claims of preferred stockholders and bondholders. Includes convertible bonds if they are held as an opportunistic means of eventually acquiring a company's stock. Also includes futures, options, rights, and warrants where the underlying assets are equities.

High-Yield Bonds: Bonds regarded, on balance, as predominantly speculative with respect to capacity to pay interest and repay principal in accordance with the terms of the obligation. Typically, these bonds have a credit rating of BB or lower and pay higher yields because they are more risky than investment-grade bonds. Also includes collateralized bond obligations (CBOs).

Inflation-Linked Bonds: Fixed coupon bonds that earn interest paid semi-annually on inflation-adjusted principal.

Long/Short Hedge Funds: Portfolios with long positions in undervalued companies and short positions in overvalued companies, to capture the disparity in prospective returns, while maintaining a low level of overall market risk.

Non-Venture Private Equity: Through negotiation or tender offer, a takeover of a majority percentage of a company's equity with the purpose of acquiring its assets and operations. Includes leveraged buyouts (LBOs).

Other Assets: Should only include assets that cannot be classified as one or more of the other asset classes.

Other Private Investments: Includes funds that are invested across multiple private investments and cannot be allocated to a single asset class. Includes multi-strategy fund-of-funds and secondary market private investments.

Private Oil & Gas/Natural Resources: Funds created to invest in the exploration or development of energy-related reserves and natural resources.

Private Real Estate: Includes ownership positions in land and buildings as well as private operating companies. May also include equity-like investments in mortgages or land leases that include substantial participation in revenues and capital appreciation. Does not include equity mortgages such as collateralized mortgage obligations (CMOs), mortgage-backed securities, publicly traded REITs, or other public real estate.

Public Energy/Natural Resources: Includes marketable energy funds and natural resources.

Public Real Estate: Includes REITs and other public real estate equity such as umbrella partnership REITs (UPREITs), and other public operating companies (REOCs).

Timber: Funds created to invest in timber-related business. Usually limited partnerships.

Venture Capital: Investments in private securities of new companies or companies considered to be in the early stages of growth; these investments may have high risk and the potential for high return. ■