



Board of Regents Report

for August 2018

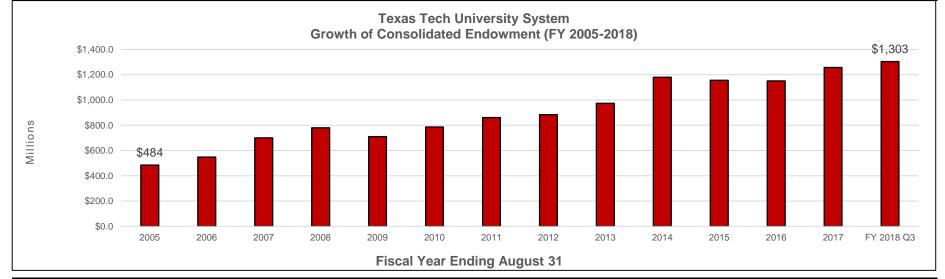
Texas Tech University System Endowment

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Endowment Data

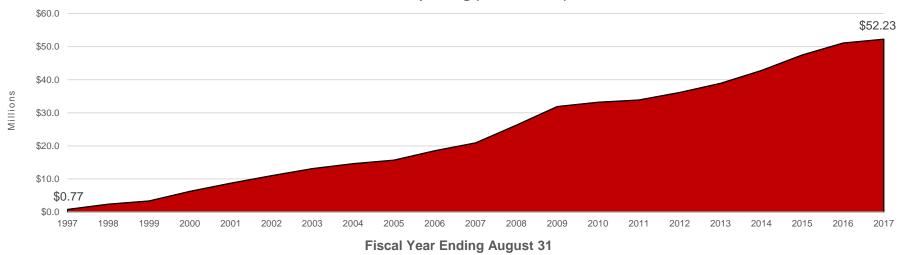


HISTORICAL MARKET VALUE (Fiscal Year Q3 2018)

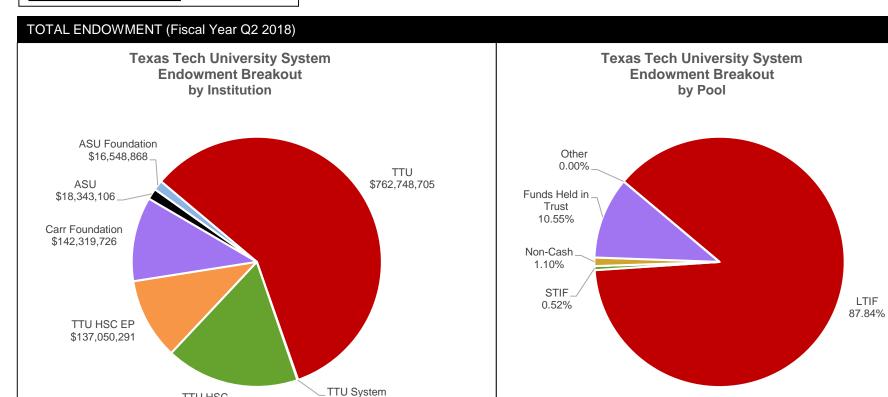


HISTORICAL SPENDING (Fiscal Year)

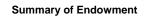
Texas Tech University System Growth of Spending (FY 1997-2017)



The 4.5% distribution rate has been realized every year since inception.



\$1,228,477



TTU HSC

\$224,898,701

	ττυ	TTU System	TTU HSC	TTU HSC EP	Carr Foundation	ASU	ASU Foundation	Total
LTIF	\$716,158,061	\$1,228,453	\$156,053,157	\$103,048,222	\$133,656,560	\$17,949,499	\$16,548,868	\$1,144,642,820
STIF	\$3,575,886	\$24	\$2,687,095	\$98,729	\$0	\$393,469	\$0	\$6,755,202
Non-Cash	\$4,319,603	\$0	\$1,337,360	\$0	\$8,663,166		\$0	\$14,320,130
Funds Held in Trust	\$38,695,154	\$0	\$64,821,089	\$33,903,341	\$0	\$0	\$0	\$137,419,584
Other	\$0	\$0	\$0	\$0	\$0	\$138	\$0	\$138
Total	\$762,748,705	\$1,228,477	\$224,898,701	\$137,050,291	\$142,319,726	\$18,343,106	\$16,548,868	\$1,303,137,874

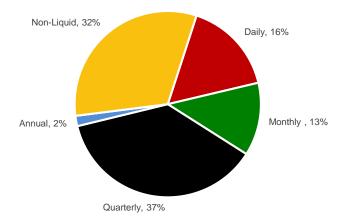
31st August 2018

Endowment Data (cont.)



LTIF Liquidity

LTIF Liquidity



LTIF		Liquidity
Daily	\$197,411,798	16.3%
Monthly	\$153,811,646	12.7%
Quarterly	\$450,534,901	37.2%
Annual	\$21,800,076	1.8%
2-Year	\$0	0.0%
Non-Liquid	\$387,556,904	32.0%
Total LTIF	\$1,211,115,325	100%

\$400					7
\$350					_
\$300					
\$250					F
\$200					F
\$150					F
\$100					1
\$50					_
\$0					
	25%	Most Likely 50%	75%	100%	
		Percentage Cor	mmitments Called		
	Maximum Rema	aining Annual Cash Needed	Total Daily & N	Ionthly Liquidity	

	<u>Commitment</u> (Capital Called	<u>Distributions</u>	<u>Account</u> Balance	<u>Remaining</u> Commitment
Private Equity	\$238,660,000	\$160,302,391	\$66,544,241	\$129,310,234	\$78,357,609
Private Credit	\$193,325,000	\$132,805,714	\$47,946,328	\$129,059,137	\$60,519,286
Private Real Assets	\$262,663,450	\$234,928,621	\$208,901,461	\$120,338,891	\$27,734,829
otal Illiquid Assets	\$694,648,450	\$528,036,726	\$323,392,030	\$378,708,262	\$166,611,724

Annual Spending \$61,000,000

Total Committed Funds \$227,611,724

Unfunded Commitments - Sensitivity Analysis	25% Called	Most Likely 50% Called	75% Called	<u>100% Called</u>
Maximum Remaining Annual Cash Needed	\$102,652,931	\$144,305,862	\$185,958,793	\$227,611,724
Percentage of Daily & Monthly Liquidity	29%	41%	53%	65%

Liquidity Sensitivity

ikely	75% Called	100% Called

Market Data

Benchmarks	Underlying	Weight	MTD Perf.	QTD Perf.	Calendar YTD	Fiscal YTD	Nacubo YTD	1 Year Perf.	3 Year Perf.	5 Year Perf.
Policy Benchmarks			0.34%	1.20%	3.05%	8.08%	1.20%	8.08%	8.52%	7.99%
Equity	Global Index (MSCI ACWI with USA Gross)	30%	0.83%	3.90%	3.72%	12.00%	3.90%	12.00%	12.08%	9.84%
Debt	Global Bonds (Barclays Global Agg)	25%	0.10%	-0.06%	-1.52%	-1.36%	-0.06%	-1.36%	2.44%	1.34%
Diversifying Assets	HFRX Global Hedge Fund	15%	0.45%	0.30%	-0.55%	1.54%	0.30%	1.54%	4.33%	4.28%
Private Investments	Private Market Benchmark	30%	0.00%	0.00%	7.88%	15.60%	0.00%	15.60%	11.75%	12.80%
Other Benchmarks										
Equity	S&P 500 Total Return		3.26%	7.10%	9.94%	19.66%	7.10%	19.66%	16.11%	14.52%
Equity	Non US Developed Equity (MSCI EAFE)		-1.93%	0.48%	-2.28%	4.39%	0.48%	4.39%	7.04%	5.73%
Equity	EM Equities (MSCI EMF)		-2.70%	-0.57%	-7.18%	-0.68%	-0.57%	-0.68%	11.42%	5.04%
Debt	EM Bonds (JPM EM Bond Index)		-1.92%	0.10%	-5.14%	-4.63%	0.10%	-4.63%	4.60%	4.81%
Cash & Alpha Pool	90 Day T-Bills		0.17%	0.34%	1.21%	1.61%	0.34%	1.61%	0.84%	0.52%
Hedge Funds	HFRI FOF Composite		0.32%	0.57%	1.25%	3.80%	0.57%	3.80%	2.75%	3.51%
Private Investments	Private Market Benchmark		0.00%	0.00%	7.88%	15.60%	0.00%	15.60%	11.75%	12.80%

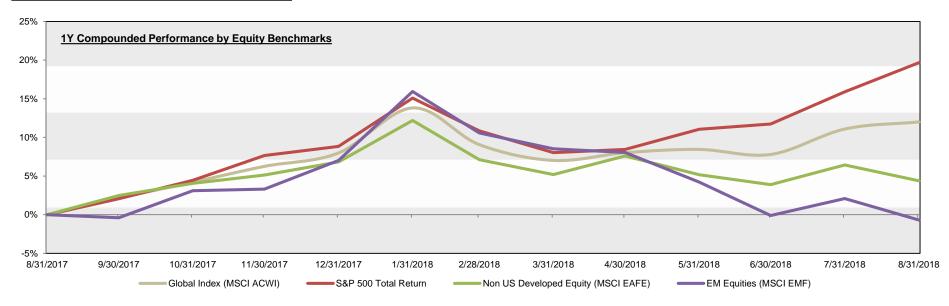
CIO NOTES:

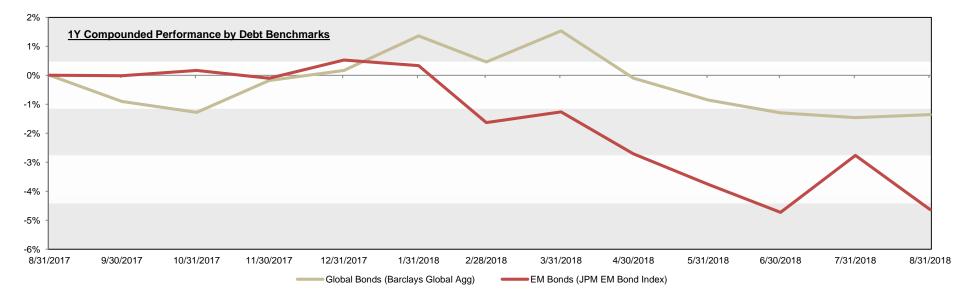
Non-US equities declined in August amid escalating trade tensions between the US and its major trading partners, a currency crisis in Turkey, and uncertainty in Italy. A spate of positive macroeconomic data was unable to lift the MSCI Europe Index, which fell 2.8% last month. Emerging market equities also ended lower, losing 2.7%, according to the MSCI Emerging Markets Index. Meanwhile, US stocks held firm with the S&P 500 Index gaining 3.3%, as robust GDP growth in the second quarter overshadowed trade disputes and macroeconomic worries.

Within fixed income, geopolitical turmoil pushed safe-haven debt higher with the 10-year US Treasury yield falling 10 basis points to 2.86% and the 10-year German bund yield declining 12 basis points to 0.33%. Credit spreads were modestly wider across the board with emerging markets bearing the brunt, declining 1.7%, according to the JPM Emerging Market Bond Index; local emerging market debt fared worse with the JPM GBI-EM Global Diversified Index falling 6.1% as Turkey's currency travails and US dollar strength impacted returns.

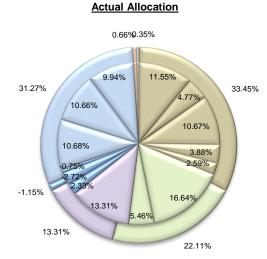
In real assets, the Bloomberg Commodity Index declined 1.8% as the trade dispute between the US and China weighed on the agriculture subindex, which fell 6.0% in August. Meanwhile, master limited partnerships (MLPs) continued their run, ending the month up 1.6% with year-to-date gains totaling 7.6%.

Market Data (cont.)

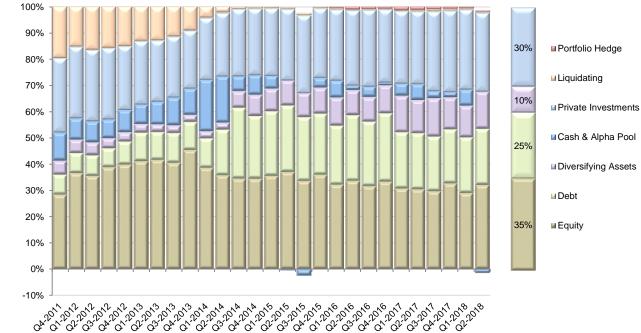


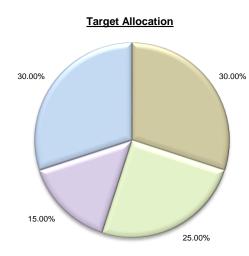


Asset Class Allocation: Actual vs. Target



Asset Class		Actual \$ Allocation	1	Total %	Target %	Target Range
Assel Glass	Physical	Synthetic	Total	Allocation	Allocation	Target Kange
Equity	105,865,659	299,209,207	405,074,866	33.45%	30%	30% - 40%
Debt	267,728,292	0	267,728,292	22.11%	25%	20% - 30%
Diversifying Assets	113,494,861	47,680,770	161,175,632	13.31%	15%	5% - 15%
Cash & Alpha Pool	337,194,453	-351,063,634	-13,869,181	-1.15%	0%	0% - 10%
Private Investments	378,708,262	0	378,708,262	31.27%	30%	10% - 55%
Liquidating	8,043,036	0	8,043,036	0.66%	0%	
Portfolio Hedge	80,762	4,173,656	4,254,418	0.35%	0%	
Total	1,211,115,325	0	1,211,115,325	100%	100%	





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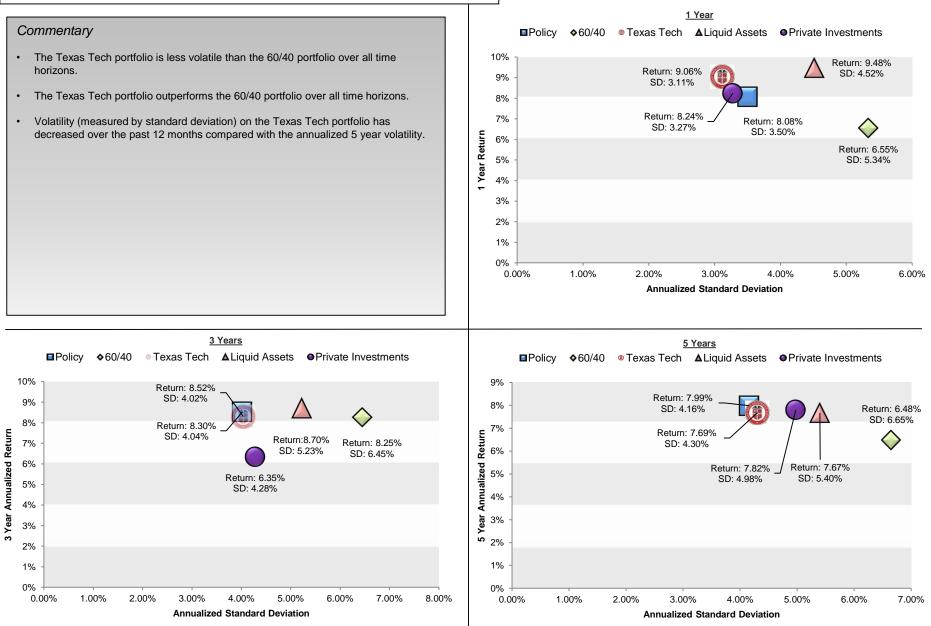
Asset Class Performance: Actual vs. Policy

QTD Performar	QTD Performance				Month				QTD				
4.	12% Equity	Asset Class	Physical Return	Synthetic Overlay	Alpha Pool + Cash	Total Return	Policy	Asset Class	Physical Return	Synthetic Overlay	Alpha Pool + Cash	Total Return	Policy
1.54%	Diversifying Assets	Equity	1.29%	0.74%	-0.08%	0.94%	0.83%	Equity	3.25%	3.61%	0.50%	4.12%	3.90%
0.11%	Private Investments	Debt	-0.51%			-0.51%	0.10%	Debt	0.00%			0.00%	-0.06%
0.11%	Private investments	Diversifying Assets	-0.10%	2.01%	-0.08%	0.52%	0.45%	Diversifying Assets	0.80%	2.72%	0.50%	1.54%	0.30%
0.00%	Cash & Alpha Pool	Cash & Alpha Pool	0.00%			0.00%		Cash & Alpha Pool	0.00%			0.00%	
-		Private Investments	0.00%			0.00%	0.00%	Private Investments	0.11%			0.11%	0.00%
0.00%	Debt	Portfolio Hedge Contri.				0.05%		Portfolio Hedge Contri.				-0.02%	
-2.0% 0.0% 2.0% 4.0%	6.0%	Total	0.02%	0.89%	-0.08%	0.34%	0.34%	Total	0.60%	3.46%	0.50%	1.59%	1.20%

One Year Performance		Calendar YTD									1 Year		
- 13.47%	Equity	Asset Class	Physical Return	Synthetic Overlay	Alpha Pool + Cash	Total Return	Policy	Asset Class	Physical Return	Synthetic Overlay	Alpha Pool + Cash	Total Return	Policy
8.24%	Private Investments	Equity	3.66%	1.97%	2.51%	4.15%	3.72%	Equity	11.58%	9.75%	4.62%	13.47%	12.00%
		Debt	6.81%			6.81%	-1.52%	Debt	7.42%			7.42%	-1.36%
7.59%	Diversifying Assets	Diversifying Assets	5.31%	-0.13%	2.51%	4.60%	-0.55%	Diversifying Assets	8.13%	1.12%	4.62%	7.59%	1.54%
7.42%	Debt	Cash & Alpha Pool	0.10%			0.10%		Cash & Alpha Pool	0.17%			0.17%	
1.42.70	Dobt	Private Investments	3.70%			3.70%	7.88%	Private Investments	8.24%			8.24%	15.60%
0.17%	Cash & Alpha Pool	Portfolio Hedge Contri.				0.09%		Portfolio Hedge Contri.				-0.16%	
0% 5% 10% 15% 20%		Total	4.50%	1.53%	2.51%	4.45%	3.05%	Total	7.94%	7.88%	4.62%	9.06%	8.08%

31st August 2018

Long Term Risk/Return of Endowment vs. 60/40 Portfolio & Policy Returns



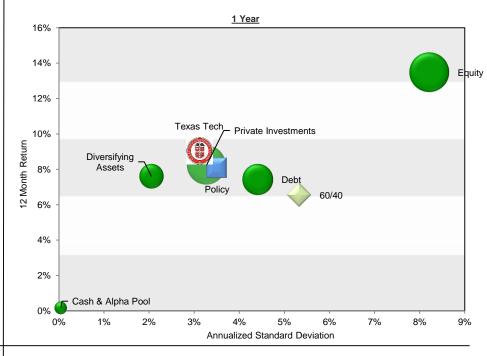
10 TEXAS TECH UNIVERSITY SYSTEM

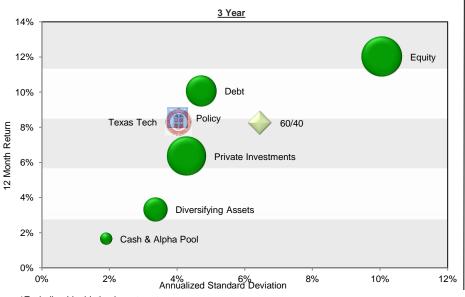
11 TEXAS TECH UNIVERSITY SYSTEM

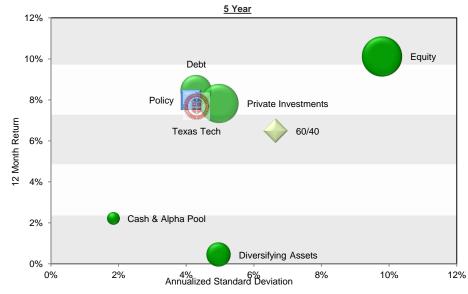
Risk Profile*

Commentary

- Diversifying Assets and Private Investments have provided the highest risk adjusted returns over the last 12 months
- Equity and Debt have generated the lowest risk adjusted returns over the last 12 months.





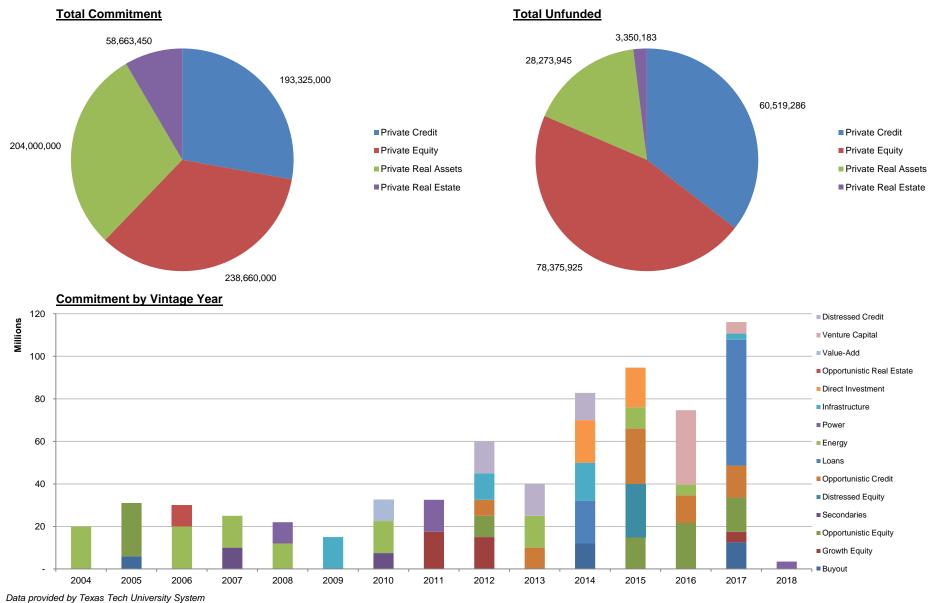


*Excluding Liquidating investments.

<u> Appendix I – Sub-Asset Detail</u>

Fund	Current Exposure	MTD Perf.	QTD Perf.	Calendar YTD	Fiscal YTD	Nacubo YTD	1 Year Perf.	3 Year Perf.	5 Year Perf.
TOTAL	1,211,115,325	0.34%	1.59%	4.45%	9.06%	1.59%	9.06%	8.30%	7.69%
Policy		0.34%	1.20%	3.05%	8.08%	1.20%	8.08%	8.52%	7.99%
Portfolio Hedge Contribution	4,254,418	0.05%	-0.02%	0.09%	-0.16%	-0.02%	-0.16%	n/a	n/a
Equity	405,074,866	0.94%	4.12%	4.15%	13.47%	4.12%	13.47%	12.02%	10.11%
Equity Policy Benchmark (MSCI ACWI with USA Gross)		0.83%	3.90%	3.72%	12.00%	3.90%	12.00%	12.08%	9.84%
US Equity	139,861,993	4.06%	8.80%	10.04%	21.80%	8.80%	21.80%	18.59%	14.49%
Benchmark: S&P 500 Total Return		3.26%	7.10%	9.94%	19.66%	7.10%	19.66%	16.11%	14.52%
Global Equity	57,716,237	1.84%	5.07%	8.76%	13.17%	5.07%	13.17%	11.02%	11.97%
Benchmark: MSCI ACWI with USA Gross		0.83%	3.90%	3.72%	12.00%	3.90%	12.00%	12.08%	9.84%
Non US Developed Equity	129,222,063	-2.00%	0.13%	-0.48%	7.10%	0.13%	7.10%	8.24%	6.22%
Benchmark: MSCI EAFE (Net)		-1.93%	0.48%	-2.28%	4.39%	0.48%	4.39%	7.04%	5.73%
Non US Emerging Markets Equity	46,942,831	-1.30%	1.51%	-4.72%	5.14%	1.51%	5.14%	17.53%	9.98%
Benchmark: MSCI EMF (Net)		-2.70%	-0.57%	-7.18%	-0.68%	-0.57%	-0.68%	11.42%	5.04%
Alternative Equity	31,331,743	2.14%	2.48%	3.86%	14.11%	2.48%	14.11%	10.08%	8.20%
Benchmark: MSCI ACWI with USA Gross		0.83%	3.90%	3.72%	12.00%	3.90%	12.00%	12.08%	9.84%
Debt	267,728,292	-0.51%	0.00%	6.81%	7.42%	0.00%	7.42%	10.05%	8.46%
Debt Policy Benchmark (Barclays Global Agg)		0.83%	3.90%	3.72%	12.00%	3.90%	12.00%	12.08%	9.84%
Sovereign/Investment Grade Bonds	-	n/a	n/a	n/a	n/a	n/a	n/a	2.96%	3.87%
Benchmark: Barclays Global Aggregate		0.10%	-0.06%	-1.52%	-1.36%	-0.06%	-1.36%	2.44%	1.34%
Credit	201,584,453	0.13%	0.71%	11.37%	12.72%	0.71%	12.72%	11.58%	8.95%
Benchmark: Barclays Global Aggregate		0.10%	-0.06%	-1.52%	-1.36%	-0.06%	-1.36%	2.44%	1.34%
Emerging Markets Debt	66,143,839	-2.46%	-2.18%	-6.06%	-7.12%	-2.18%	-7.12%	8.82%	7.38%
Benchmark: JP Morgan EM Bond Index		-1.92%	0.10%	-5.14%	-4.63%	0.10%	-4.63%	4.60%	4.81%
Diversifying Assets	161,175,632	0.52%	1.54%	4.60%	7.59%	1.54%	7.59%	3.32%	0.44%
Benchmark: HFRXGL Index		0.45%	0.30%	-0.55%	1.54%	0.30%	1.54%	4.33%	4.28%
Alpha Pool & Collateral	(35,202,995)	-0.10%	0.52%	2.45%	4.32%	0.52%	4.32%	1.65%	2.21%
Cash Collateral	68,473,908	0.15%	0.30%	0.88%	1.12%	0.30%	1.12%	0.51%	n/a
Collateral Held Elsewhere	10,040,030	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	n/a	n/a
Adjustments for Synthetic Exposure	(351,063,634)								
Alpha Pool	237,346,700	-0.17%	0.58%	2.94%	5.41%	0.58%	5.41%	4.36%	4.75%
Benchmark: HFRI FOF Index		0.32%	0.57%	1.25%	3.80%	0.57%	3.80%	2.75%	3.51%
Cash	21,333,815	0.15%	0.34%	0.99%	1.68%	0.34%	1.68%	0.82%	0.50%
Liquidating	8,043,036	3.97%	1.38%	-5.74%	-14.08%	1.38%	-14.08%	33.13%	24.43%
Private Investments	378,708,262	0.00%	0.11%	3.70%	8.24%	0.11%	8.24%	6.35%	7.82%
Benchmark: Private Market Composite		0.00%	2.85%	7.88%	15.60%	0.00%	15.60%	11.75%	12.80%
Private Equity	129,310,234	0.05%	-0.15%	3.45%	6.60%	-0.15%	6.60%	3.98%	7.38%
Private Credit	129,059,137	0.02%	0.20%	6.14%	9.74%	0.20%	9.74%	7.22%	7.85%
Private Diversifying Assets	120,338,891	-0.08%	0.28%	1.81%	8.35%	0.28%	8.35%	6.94%	7.76%

Appendix VII - Private Markets Report (as of August 2018) - Total Commitment



Reported valuations use latest available statements ranging from March 2018 to August 2018 Adjusted Valuations include all cashflows through August 2018

Appendix VII - Private Markets Report (as of August 2018) - Performance Analysis by Asset Class & Strategy Type

Performance by Asset Class

Asset Class	# of Funds	Commitment	Funded	Paid-In Capital	Distributions	% Drawn	Reported Valuation	Adjusted Valuation	IRR	TVPI
Private Equity	19	\$238,660,000	\$160,302,391	\$165,790,615	\$66,544,241	69%	\$121,602,302	\$126,610,972	4.94%	1.17
Private Credit	15	\$193,325,000	\$132,805,714	\$137,634,893	\$47,946,328	71%	\$106,887,082	\$114,475,232	6.52%	1.18
Private Real Assets	16	\$204,000,000	\$177,664,130	\$193,659,149	\$187,976,784	95%	\$75,624,020	\$76,401,838	14.31%	1.38
Private Real Estate	4	\$58,663,450	\$57,264,491	\$59,248,622	\$20,924,677	101%	\$46,361,439	\$45,175,449	2.81%	1.12
Total	54	\$694,648,450	\$528,036,726	\$556,333,279	\$323,392,030	80%	\$350,474,843	\$362,663,491	8.06%	1.24

Performance by Strategy Type

Asset Class	Strategy	# of Funds	Commitment	Funded	Paid-In Capital	Distributions	% Drawn	Reported Valuation	Adjusted Valuation	IRR	TVPI
Private Equity	Buyout	3	\$30,500,000	\$24,792,185	\$25,698,964	\$9,304,163	84%	\$20,599,789	\$20,599,789	7.11%	1.16
	Distressed Equity	1	\$25,000,000	\$5,649,992	\$5,774,992	\$1,162,372	23%	\$5,715,329	\$5,715,329	10.24%	1.19
	Growth Equity	3	\$37,500,000	\$27,369,441	\$31,013,310	\$6,975,240	83%	\$29,545,370	\$30,129,712	6.33%	1.20
	Opportunistic Equity	7	\$87,760,000	\$68,655,882	\$68,382,223	\$35,055,713	78%	\$44,407,531	\$45,745,950	4.50%	1.18
	Secondaries	2	\$17,500,000	\$16,406,432	\$17,102,042	\$13,944,445	98%	\$5,305,430	\$5,305,430	2.59%	1.13
	Venture Capital	3	\$40,400,000	\$17,428,459	\$17,819,084	\$102,308	44%	\$16,028,853	\$19,114,762	7.24%	1.08
	Total	19	\$238,660,000	\$160,302,391	\$165,790,615	\$66,544,241	69%	\$121,602,302	\$126,610,972	4.94%	1.17
Private Credit	Distressed Credit	3	\$42,750,000	\$40,119,345	\$40,248,413	\$23,206,609	94%	\$22,836,397	\$22,836,397	3.84%	1.14
	Loans	6	\$79,075,000	\$52,751,742	\$53,353,169	\$11,863,853	67%	\$45,345,108	\$52,236,261	9.54%	1.20
	Opportunistic Credit	6	\$71,500,000	\$39,934,627	\$44,033,311	\$12,875,866	62%	\$38,705,577	\$39,402,574	7.28%	1.19
	Total	15	\$193,325,000	\$132,805,714	\$137,634,893	\$47,946,328	71%	\$106,887,082	\$114,475,232	6.52%	1.18
Private Real Assets	Energy	8	\$112,000,000	\$108,178,737	\$114,335,444	\$118,389,295	102%	\$34,944,736	\$34,909,332	13.84%	1.36
	Infrastructure	4	\$48,500,000	\$41,144,621	\$50,044,641	\$57,741,018	103%	\$20,975,032	\$23,054,742	29.46%	1.61
	Power	3	\$28,500,000	\$25,408,008	\$26,323,136	\$11,722,211	92%	\$16,729,265	\$15,462,777	0.93%	1.03
	Opportunistic Real Assets	1	\$15,000,000	\$2,932,764	\$2,955,928	\$124,260	20%	\$2,974,987	\$2,974,987	0.00%	0.00
	Total	16	\$204,000,000	\$177,664,130	\$193,659,149	\$187,976,784	95%	\$75,624,020	\$76,401,838	14.31%	1.38
Private Real Estate	Direct Investment	2	\$38,663,450	\$39,709,817	\$41,637,448	\$13,153,405	108%	\$35,623,508	\$35,187,518	6.01%	1.16
	Opportunistic Real Estate	1	\$10,000,000	\$10,000,000	\$10,000,000	\$0	100%	\$3,580,790	\$3,580,790	-11.13%	0.36
	Value-Add	1	\$10,000,000	\$7,554,674	\$7,611,174	\$7,771,272	76%	\$7,157,141	\$6,407,141	12.47%	1.86
	Total	4	\$58,663,450	\$57,264,491	\$59,248,622	\$20,924,677	101%	\$46,361,439	\$45,175,449	2.81%	1.12

Appendix III – Glossary

Major Asset Classes

Alpha Pool: Investments that tend to be uncorrelated with "traditional" stock and bond investments. Not technically an asset class, but rather an investment construct within a *portable alpha framework

Cash & Equivalents: Cash and short term investments held in lieu of cash and readily converted into cash within a short time span (i.e., CDs, commercial paper, Treasury bills, etc.)

Global Debt: Investments in debt instruments located in developed markets, may include various credit, mortgage-backed and emerging markets debt securities

Global Equity: Investments in companies domiciled in developed market countries and may include opportunistic investments in emerging market countries

Liquidating: The residual investment in terminated managers

Liquid Real Assets: Liquid investments in strategies whose values are sensitive to inflation

Private Equity: Investments in equity securities and debt in operating companies that are not publicly traded on a stock exchange

Private Real Assets: Investments in equity securities and debt in operating companies that are not publicly traded on a stock exchange and whose strategies are sensitive to inflation

Sub-Asset Classes

Alternative Equity: Investments in companies globally through both long and short positions and may include non-equity instruments such as fixed income, commodities, CDS, options, etc. Credit: Investments in companies, often stressed or distressed, principally through the debt portion of capital structure Emerging Market Debt: Investments in debt securities in emerging market countries, primarily in three categories - external sovereign, local sovereign, and corporate debt Emerging Market Equity: Investments in companies located in emerging market countries Investment Grade Bonds: Investments in investment grade rated debt securities Non-US Developed Equity: Investments in companies domiciled in developed market countries US Equity: Investments in companies domiciled in the US