



TEXAS TECH UNIVERSITY SYSTEM™

Board of Regents Report for July 2014

Texas Tech University Endowment

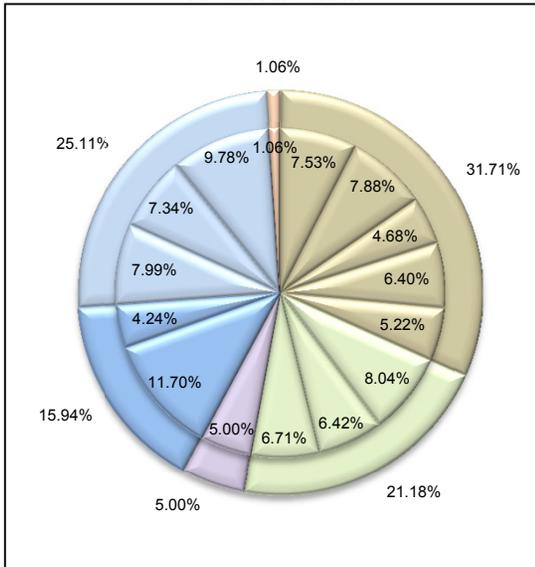


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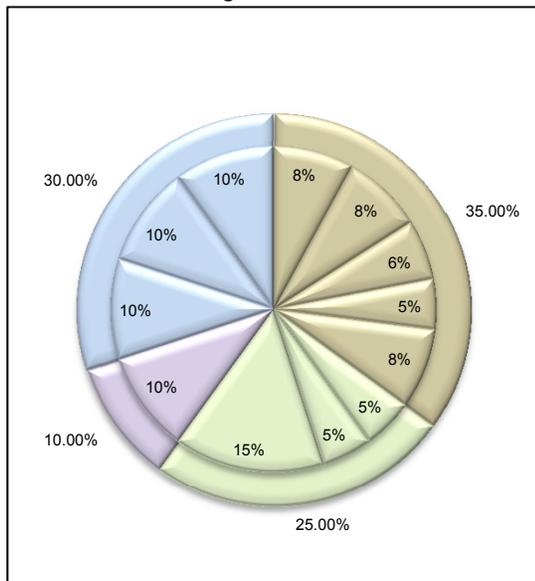


Asset Class Allocation: Actual vs. Target

Actual Allocation



Target Allocation



Asset Class	Sub-Asset Class	Actual \$ Allocation			Total % Allocation	Target % Allocation	Target Range
		Physical	Synthetic	Total			
Equity	US Equity	0	78,221,376	78,221,376	7.53%	8%	
	Global Equity	81,783,568		81,783,568	7.88%	8%	
	Non US Developed Equity	48,598,806		48,598,806	4.68%	6%	
	Non US Emerging Markets Equity	66,357,530	132,519	66,490,050	6.40%	5%	
	Alternative Equity	54,194,512		54,194,512	5.22%	8%	
	Sub-Total		250,934,417	78,353,895	329,288,312	31.71%	35%
Debt	Sovereign/Investment Grade Bonds	8,600,456	74,925,914	83,526,370	8.04%	5%	
	Credit	66,706,042		66,706,042	6.42%	15%	
	Emerging Markets Debt	69,732,550		69,732,550	6.71%	5%	
	Sub-Total		145,039,048	74,925,914	219,964,962	21.18%	25%
Liquid Real Assets				51,883,786	5.00%	10%	5% - 15%
Cash & Alpha Pool	Cash	152,173,369	-30,655,962	121,517,407	11.70%		
	Alpha Pool	166,608,338	-122,623,848	43,984,490	4.24%		
	Sub-Total		318,781,707	-153,279,810	165,501,897	15.94%	0%
Private Investments	Private Equity	83,002,279		83,002,279	7.99%	10%	
	Private Credit	76,206,716		76,206,716	7.34%	10%	
	Private Real Assets	101,605,127		101,605,127	9.78%	10%	
	Sub-Total		260,814,122	0	260,814,122	25.11%	30%
Liquidating				11,048,474	1.06%	0%	
Total				1,038,501,553	100%	100%	

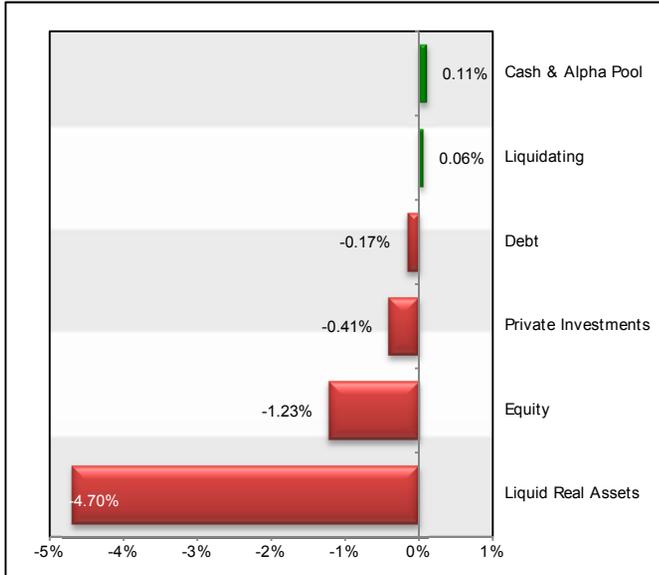
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Asset Class Performance: Actual vs. Policy

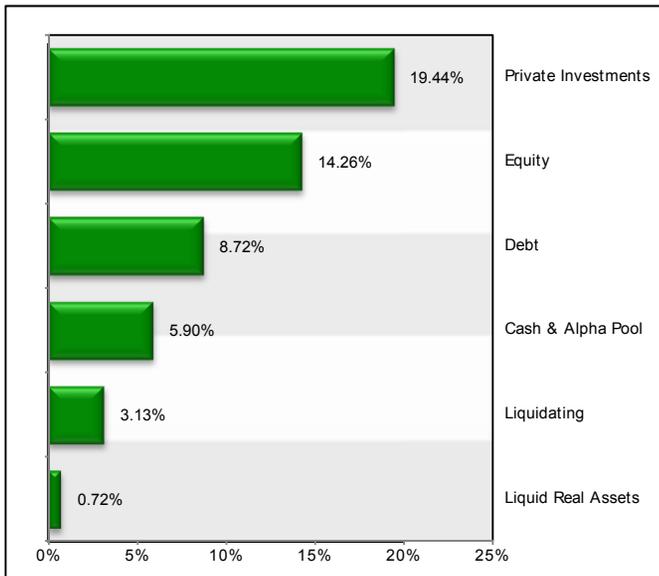
QTD Performance



Asset Class	Month				
	Physical Return	Synthetic Overlay	Alpha Pool + Cash	Total Return	Policy
Equity	-0.84%	-2.98%	0.15%	-1.23%	-1.21%
Debt	-0.20%	-0.27%	0.15%	-0.17%	-0.25%
Liquid Real Assets	-4.70%			-4.70%	0.29%
Cash & Alpha Pool	0.11%			0.11%	0.00%
Private Investments	-0.41%			-0.41%	0.00%
Liquidating	0.06%			0.06%	
Total	-0.48%	-1.66%	0.15%	-0.61%	-0.46%

Asset Class	QTD				
	Physical Return	Synthetic Overlay	Alpha Pool + Cash	Total Return	Policy
Equity	-0.84%	-2.98%	0.15%	-1.23%	-1.21%
Debt	-0.20%	-0.27%	0.15%	-0.17%	-0.25%
Liquid Real Assets	-4.70%			-4.70%	0.29%
Cash & Alpha Pool	0.11%			0.11%	0.00%
Private Investments	-0.41%			-0.41%	0.00%
Liquidating	0.06%			0.06%	
Total	-0.48%	-1.66%	0.15%	-0.61%	-0.46%

One Year Performance



Asset Class	Calendar YTD				
	Physical Return	Synthetic Overlay	Alpha Pool + Cash	Total Return	Policy
Equity	3.69%	1.15%	1.55%	3.42%	4.89%
Debt	6.61%	0.36%	1.59%	6.01%	3.66%
Liquid Real Assets	1.82%			1.82%	4.63%
Cash & Alpha Pool	2.71%			2.71%	0.02%
Private Investments	9.81%			9.81%	9.87%
Liquidating	-2.78%			-2.78%	
Total	4.63%	0.74%	1.59%	4.46%	6.05%

Asset Class	1 Year				
	Physical Return	Synthetic Overlay	Alpha Pool + Cash	Total Return	Policy
Equity	14.56%	1.15%	1.55%	14.26%	15.91%
Debt	9.34%	0.36%	1.59%	8.72%	3.97%
Liquid Real Assets	0.72%			0.72%	6.14%
Cash & Alpha Pool	5.90%			5.90%	0.04%
Private Investments	19.44%			19.44%	18.10%
Liquidating	3.13%			3.13%	
Total	12.56%	0.74%	1.59%	12.37%	13.49%

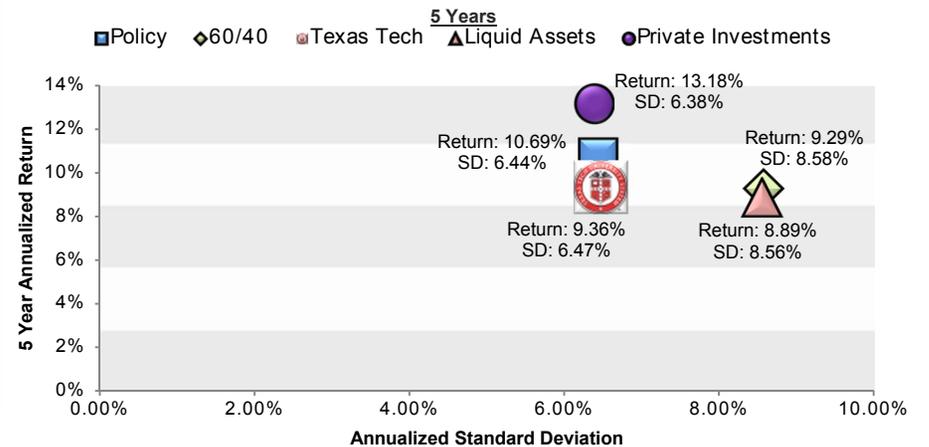
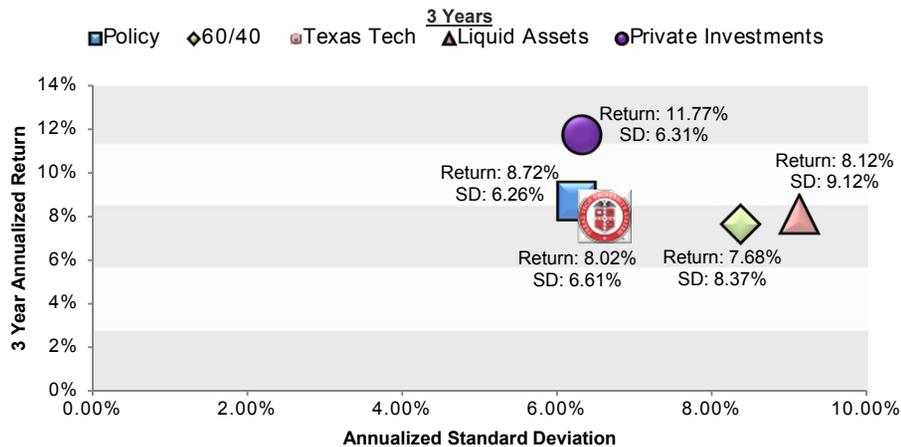
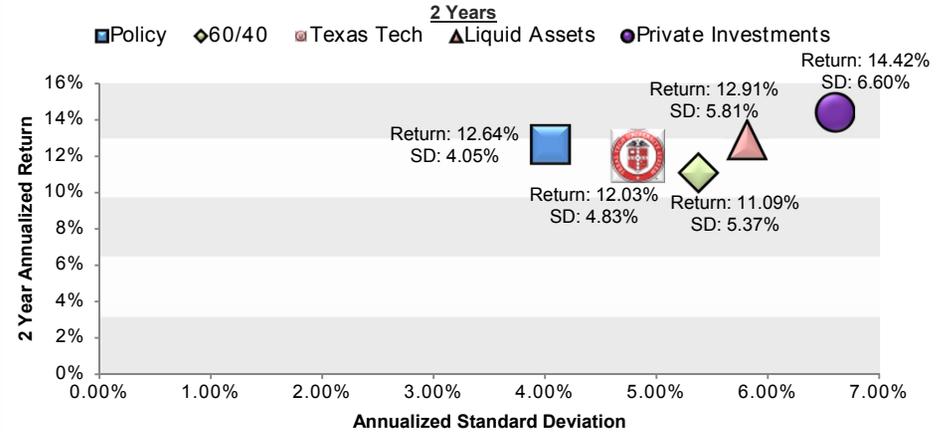
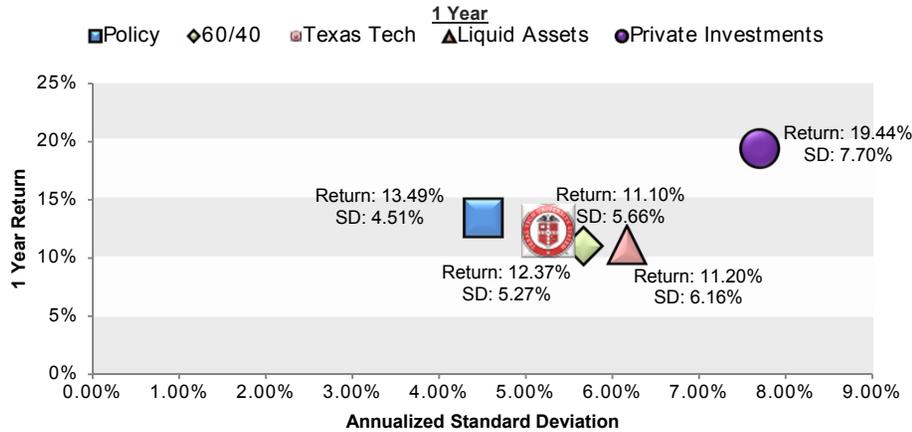
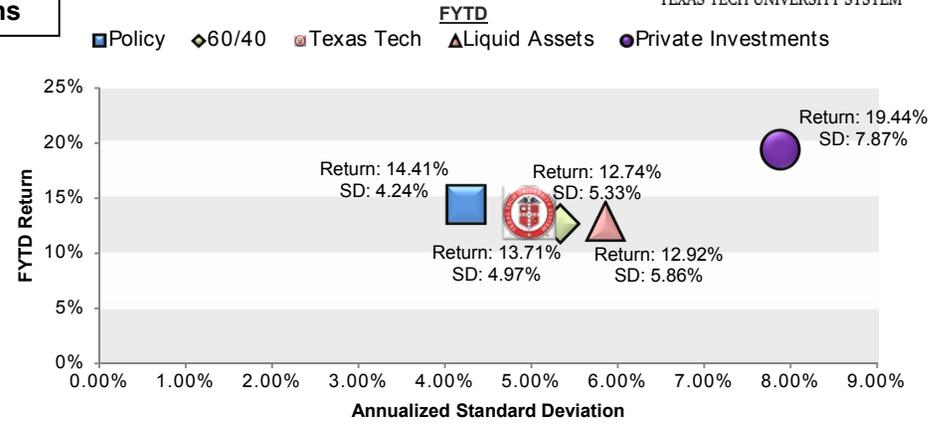


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Long Term Risk/Return of Endowment vs. 60/40 Portfolio & Policy Returns

Commentary

- The Texas Tech portfolio generates a higher risk adjusted return than a 60/40 portfolio.
- The Texas Tech portfolio is less volatile than a 60/40 portfolio and policy portfolio over a 5 year horizon.
- The 60/40 portfolio has the most volatile returns over all periods.





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Risk Profile (VaR)

- The Texas Tech portfolio has a 5% chance of losing \$43 million (or more) in a month with a 1% chance of losing \$65 million (or more) in a month based on observed portfolio volatility.
- Liquidating, Credit and Alternative Equities have generated the lowest risk adjusted returns.
- The Texas Tech portfolio exhibits less value at risk than the 60/40 Portfolio.

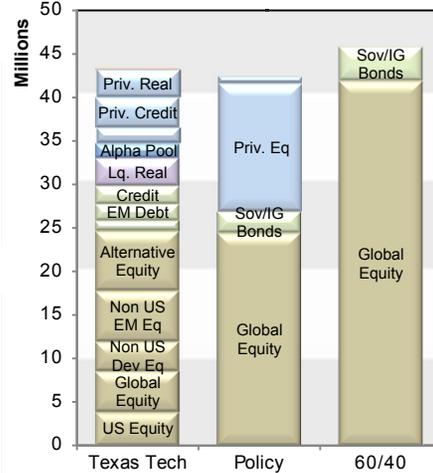
Value at Risk – One Month – 95% Confidence

- Sub Asset Classes with large Value at Risk:

Sub-Asset Class	5 % chance of losing \$
Alternative Equity	6,877,597
Non US Emerging Markets Equity	5,826,713
Global Equity	4,673,423

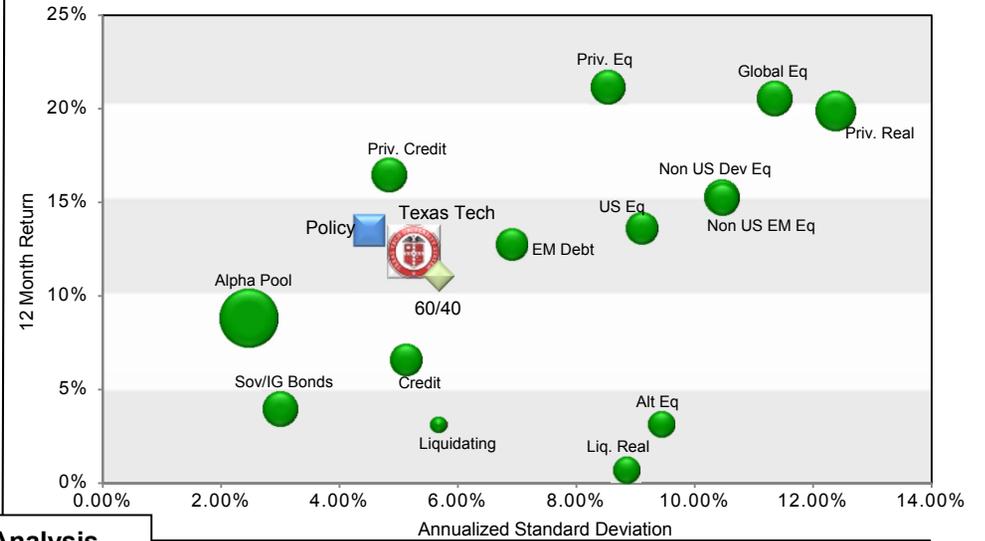
- Sub Asset Classes with small Value at Risk:

Sub-Asset Class	5 % chance of losing \$
Sovereign/Investment Grade Bonds	1,166,237
Alpha Pool	1,723,643
Private Equity	1,777,264



Risk Profile

- Alpha Pool, Private Credit and Private Equity have provided the highest risk adjusted returns.
- Liquid Real Assets, Alternative Equities and Liquidating have generated the lowest risk adjusted returns.



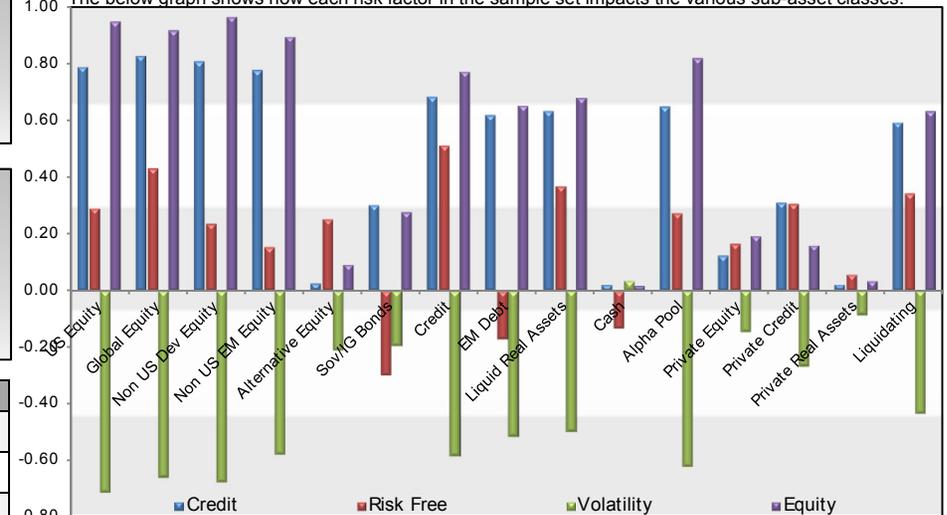
Factor Analysis

- The model analyses historical returns of the portfolio against the returns and volatility of key indicators:
 - Credit is benchmarked against the High Yield North American CDX Index.
 - Risk-Free is benchmarked against the US 10 Year Treasury Bond.
 - Volatility is benchmarked against the VIX Index.
 - Equity Markets is benchmarked against the MSCI AC World IMI (Gross).

- The model shows that performance and volatility of both the Texas Tech portfolio and a 60/40 portfolio are well explained by the 4 factor model.
- The Texas Tech portfolio exhibits a lower correlation to the Equity markets than the 60/40 and Policy portfolios, but a higher correlation to the risk free index.
- The model shows that Sovereign/Investment Grade Bonds and Private Real Assets look like a good hedge on the Equity markets.

Portfolio	Credit	Risk Free	Volatility	Equity	R ²
Texas Tech	0.79	0.32	-0.70	0.92	0.83
60/40	0.81	0.19	-0.68	0.99	0.84
Policy	0.76	0.21	-0.64	0.95	0.79

The below graph shows how each risk factor in the sample set impacts the various sub-asset classes.



Factor Analysis is calculated using the monthly return over the period January 2009 – current month.

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Equity

(Total NAV: \$ 329,288,312)



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Overview and Risk Profile by Asset Class

Commentary

- According to Goldman Sachs, the search for yield should focus on European high-dividend stocks. They offer attractive yields compared to other equity markets and asset classes, with room for dividend growth.
- European high-dividend-yield stocks usually trade at a valuation discount, in contrast to their US counterparts.
- The yield advantage in Europe is significant, and likely to stay for longer. Even with gradual increases in bond yields, the yield advantage of equities is material and likely to remain so over the coming years as real bond yields remain very low compared to previous cycles.

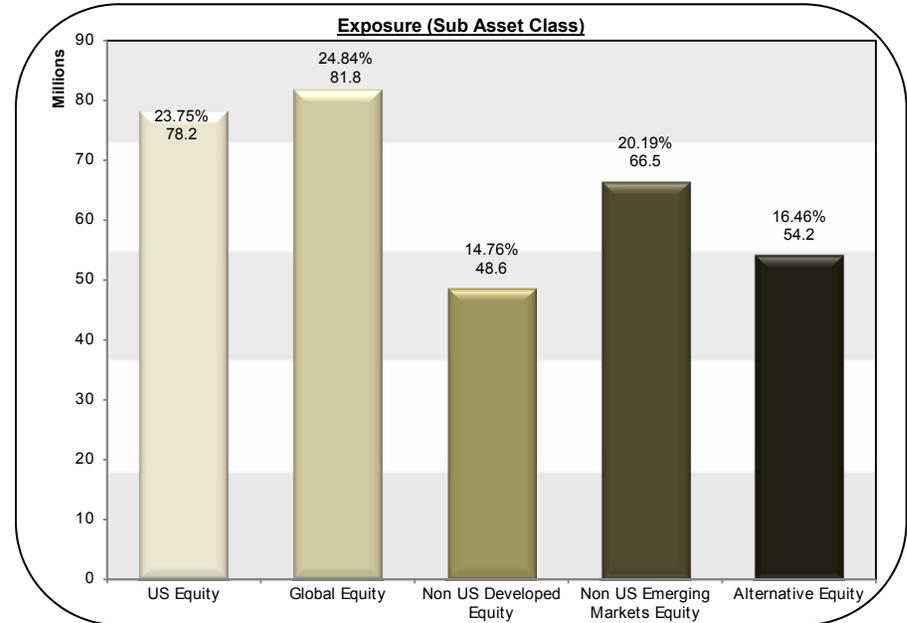
Exhibit 7: European high-dividend-yield stocks are cheaper than their US counterparts Premium/(discount) on 12-month forward P/E for top-quartile dividend yield stocks



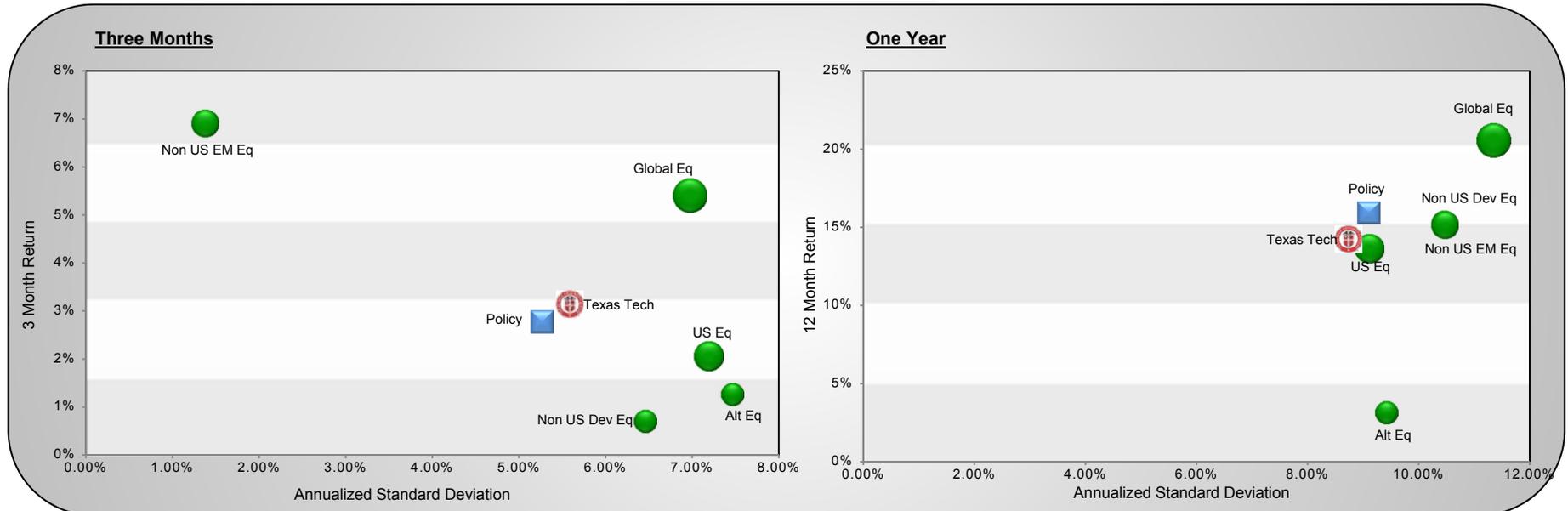
Exhibit 8: More than half of STOXX Europe 600 companies yield more than credit (again) % of stocks with yield > iBoxx EUR/GBP corporate bond yield



Source – Goldman Sachs



Risk vs. Return (Sub Assets)



*Performance is calculated using time weighted Cash on Cash returns. This is an industry standard and allows direct comparison between manager returns and policy returns.

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Debt

(Total NAV: \$ 219,964,962)

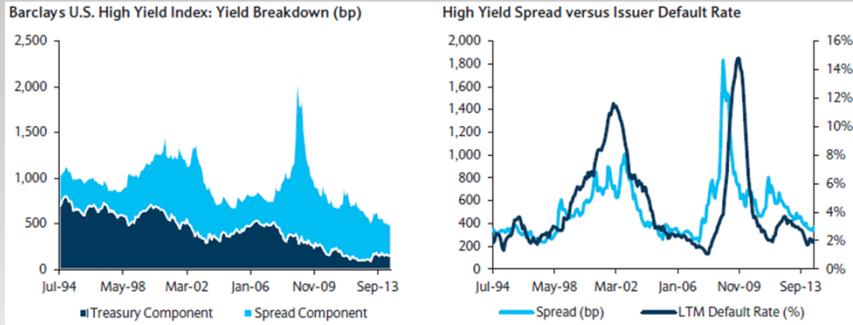


TEXAS TECH UNIVERSITY SYSTEM

Overview and Risk Profile by Asset Class

Commentary

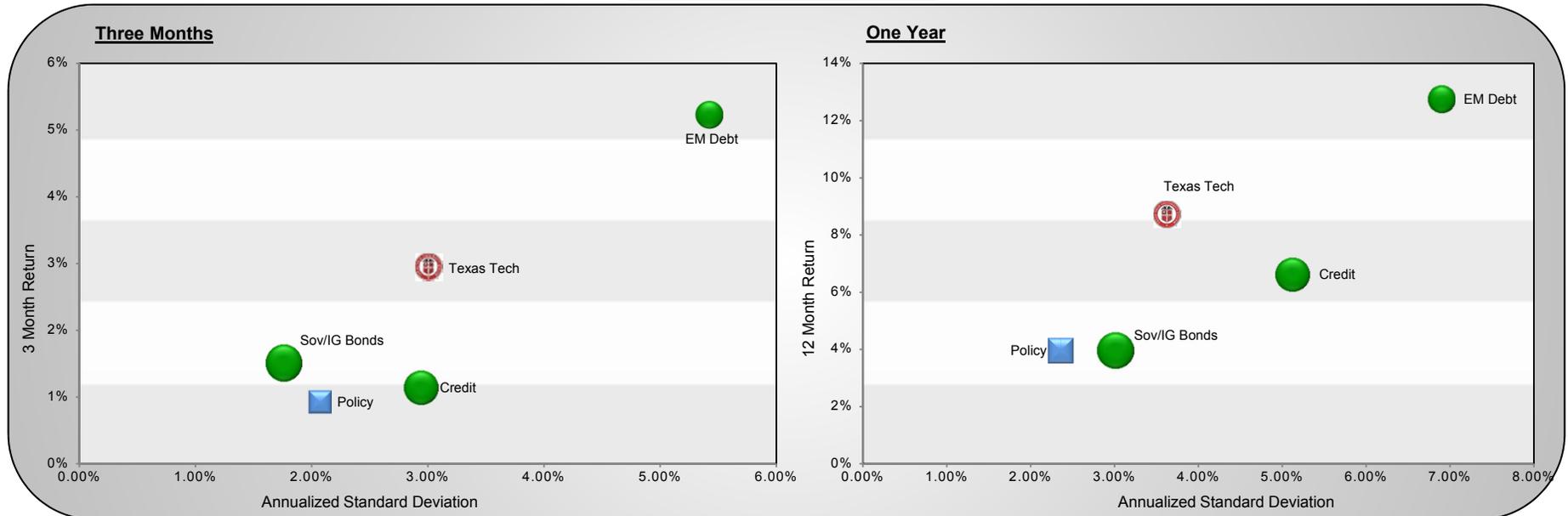
- Although the High Yield market was at all-time low yields as recently as a few weeks ago, the spread component of the yield is a long way from the tights, and more accurately represents credit risk, according to Barclays.
- Meanwhile, fundamentals are solid, and the default outlook is benign, which gives comfort that the spreads are not stretched



Source – Barclays



Risk vs. Return (Sub Assets)



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Liquid Real Assets

(Total NAV: \$ 51,883,786)



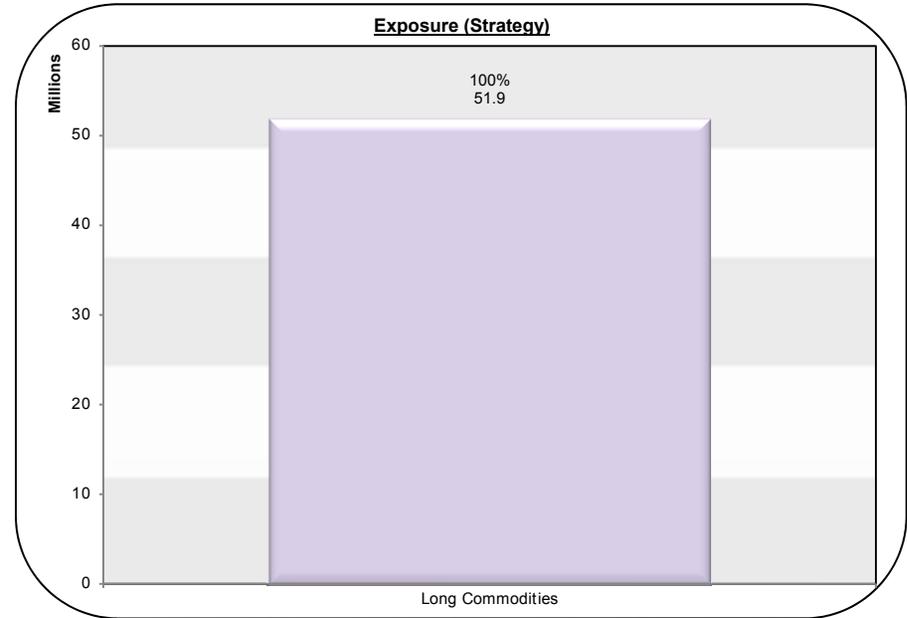
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Overview and Risk Profile by Asset Class

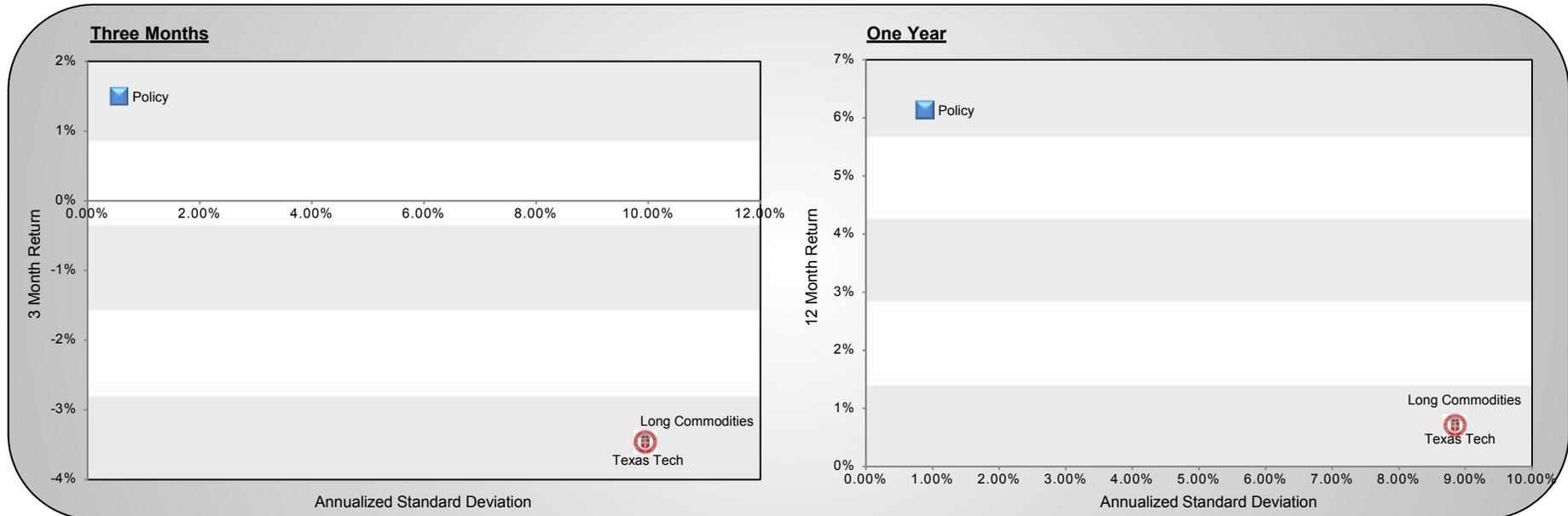
Commentary

- North Sea Brent crude fell 4.8% as Iraqi and Libyan crude oil production proved resilient despite domestic destabilization in both countries. Anticipation of falling future refinery demand, as a result of the upcoming maintenance season, put additional downward pressure on West Texas Intermediate (-6.3%), even as Cushing, OK inventories remained near five and half year lows.
- Natural Gas prices declined 13.5%, continuing a correction that began in the latter half of Q2.
- Precious metals declined 3.1%. Gold and silver both fell 3.1% amid somewhat hawkish comments by Fed Chair Yellen. Platinum drifted lower (-1.2%), while palladium (+3.5%) outperformed due to tight supply/demand balance.
- Base metals advanced 2.2% as macroeconomic momentum picked up in China. Zinc (+6.5%) led the group, aluminum also outperformed (+5.0%), while nickel lagged (-3.0%).
- Grains (-9.6%) declined as crop conditions and weather in the U.S. grain belt remained relatively favorable during the month.
- Softs declined 2.0%, with Cotton prices down 14.5%. Coffee jumped 11.4%.
- Livestock sector fell 3.5%, with lean hogs down 12.5% as wholesale pork prices dropped from record highs. Live cattle prices rose 3% due to increased packer demand and strong exports.

Source – Cohen & Steers



Risk vs. Return (Strategy)



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Cash & Alpha Pool

(Total NAV: \$ 165,501,897)



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Overview and Risk Profile by Asset Class

Commentary

- Citi suggests that the Credit/Equity cycle is heading into the third phase of its four phase model, where historically equities have outperformed bonds, and should overweight cyclicals vs defensives, growth vs value, and large vs SMID cap.
- When we enter phase four, equities join bonds in a bear market. This happens once global EPS have rolled over (not expected within the next two years).

Figure 12. MSCI World EPS (log scale) Through Credit Cycles

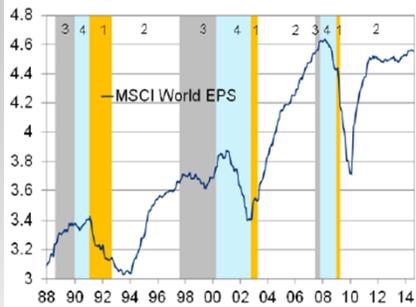
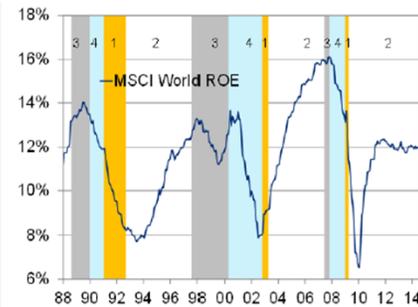
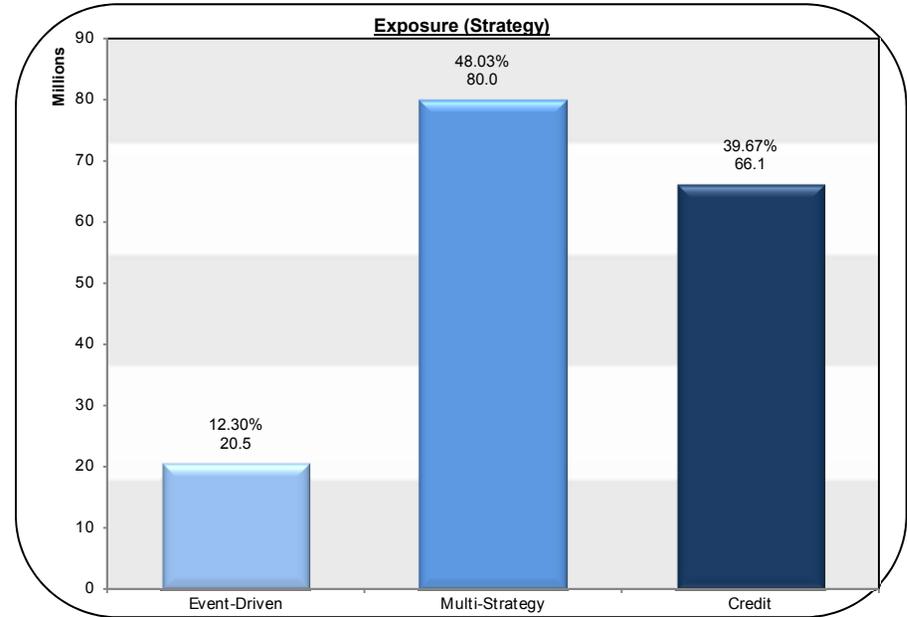


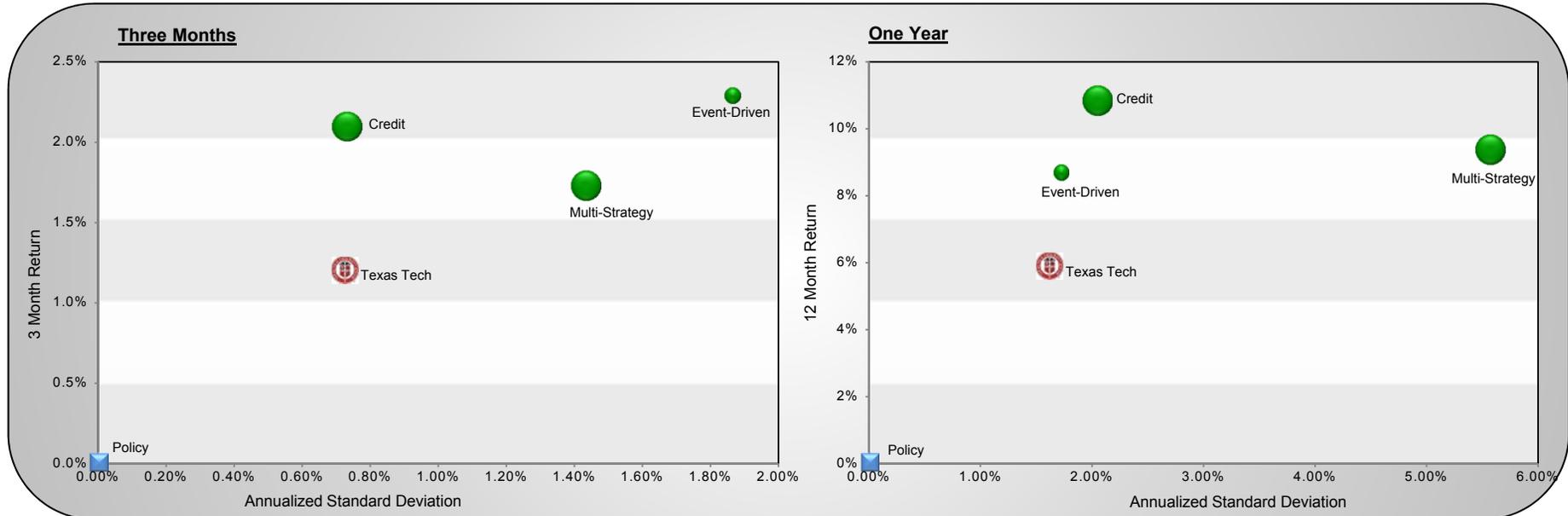
Figure 13. MSCI World RoE Through Credit Cycles



Source - Citi



Risk vs. Return (Strategy)



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Private Equity

(Total NAV: \$ 83,002,279)

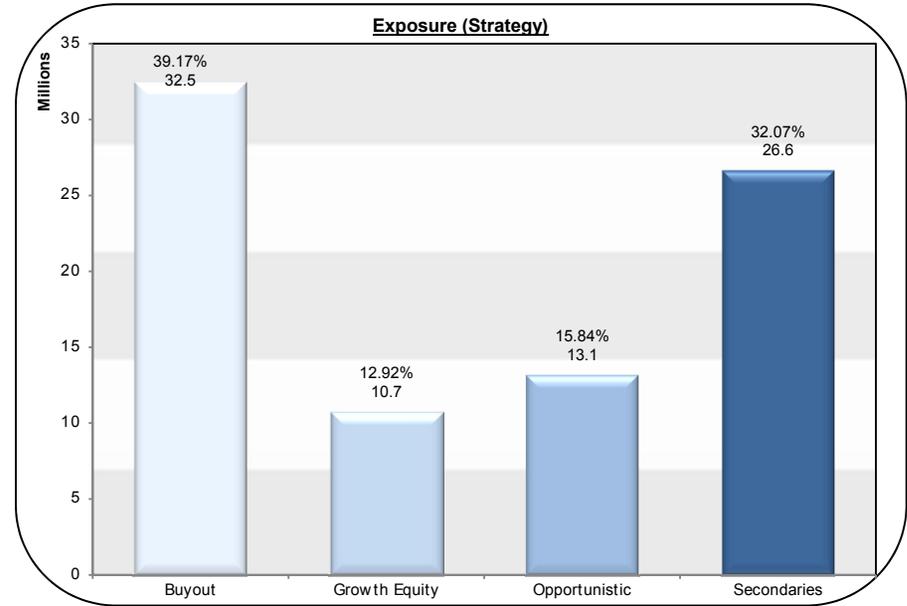
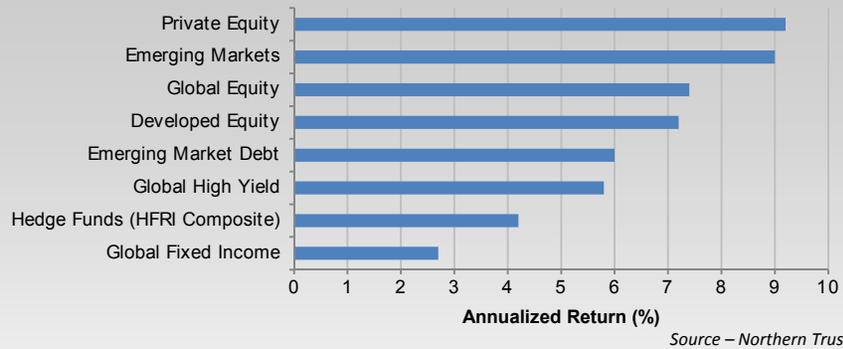


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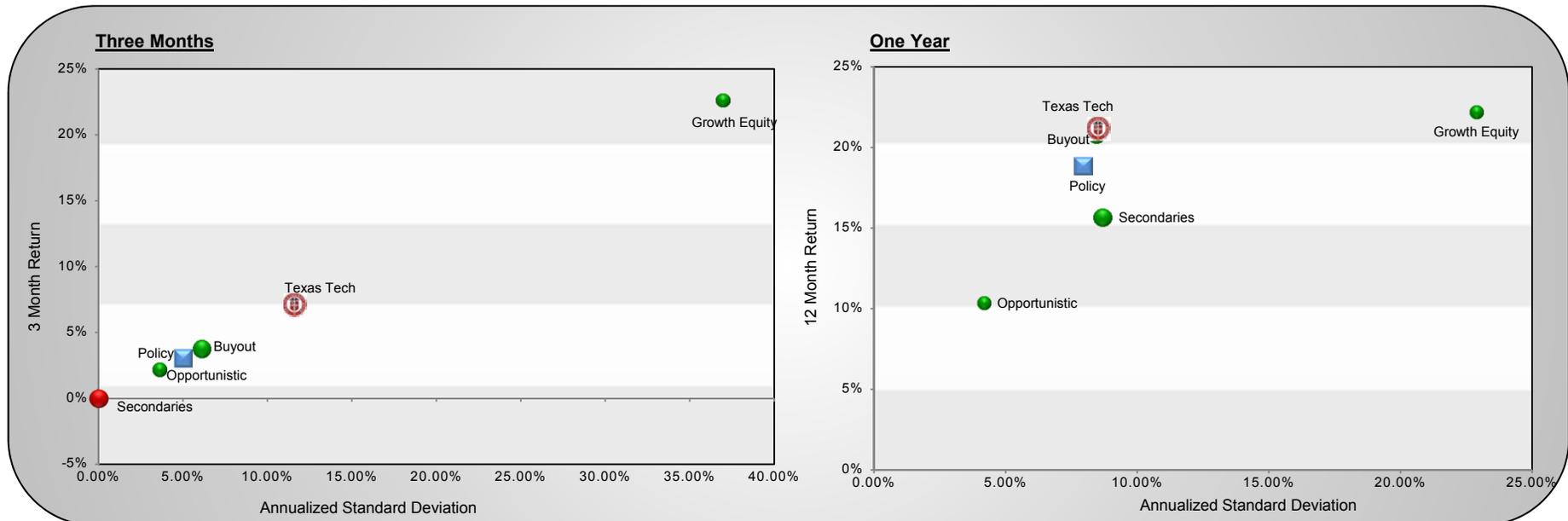
Overview and Risk Profile by Asset Class

Commentary

- Northern Trust said it sees private equity returning over 9% annually in the coming five-year period.
- It is expected to provide an illiquidity premium over public equities.
- A composite of 75% leveraged buyouts and 25% venture capital is expected to return 9.2% annually in the next five years.



Risk vs. Return (Strategy)



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Private Credit

(Total NAV: \$ 76,206,716)



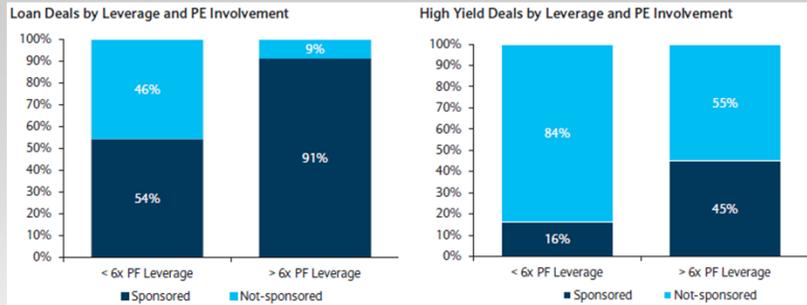
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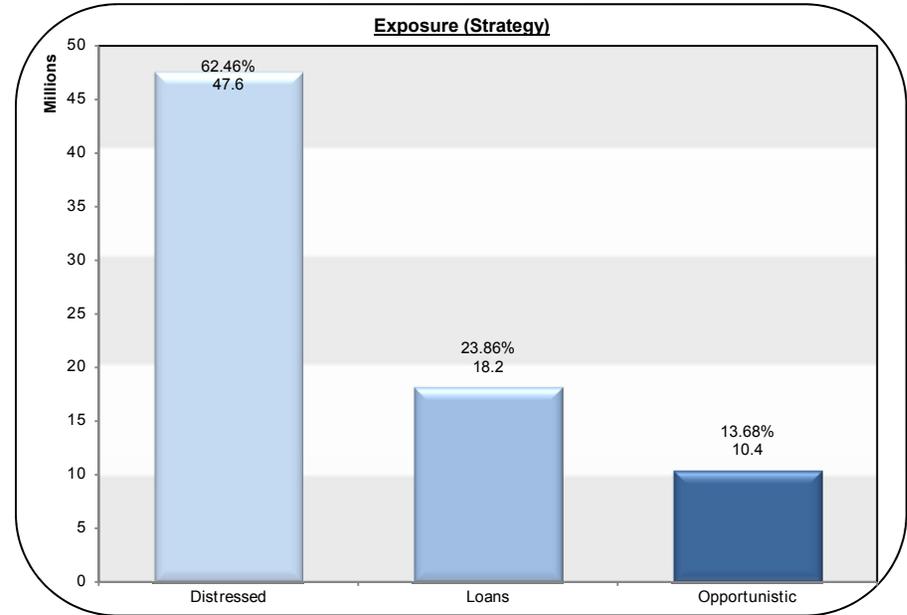
Overview and Risk Profile by Asset Class

Commentary

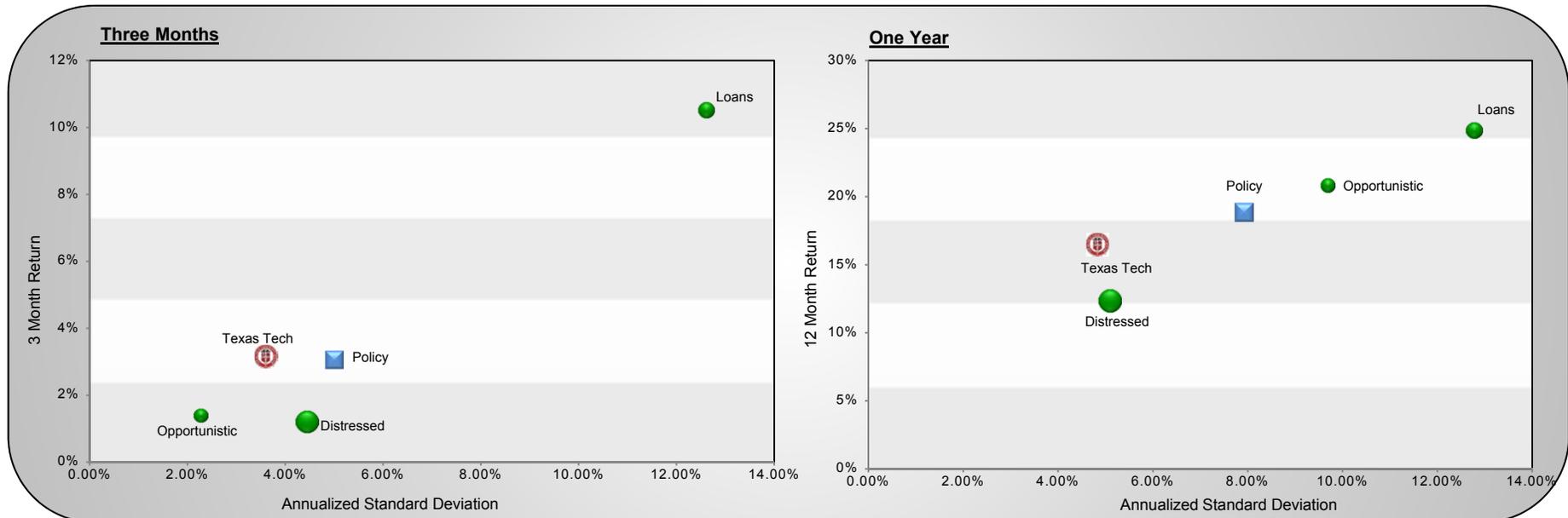
- According to Barclays, recent updated guidance on leveraged lending aimed at strengthening underwriting standards will most impact the private equity industry.
- In leveraged loan deals, private equity accounts for a little over half the deal volume under 6x total leverage, but 91% of deals over 6x.
- High yield bond volumes are generally less sponsor heavy, but sponsor share of deals over 6x leverage is nearly three times that of deals under 6x.



Source – Barclays



Risk vs. Return (Strategy)



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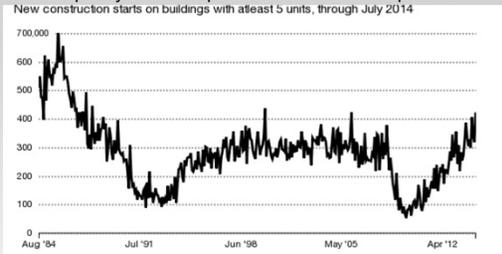
Private Real Assets

(Total NAV: \$ 101,605,127)

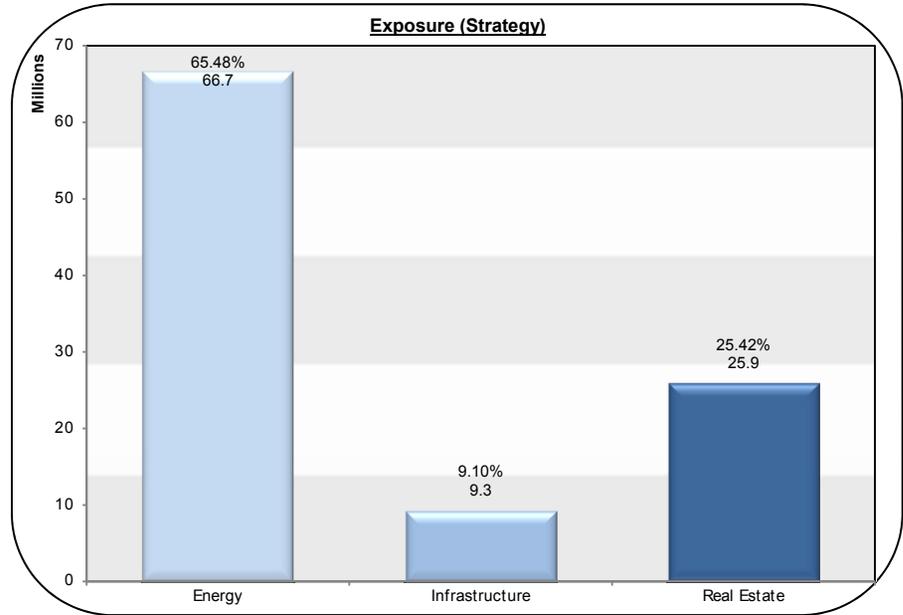
Overview and Risk Profile by Asset Class

Commentary

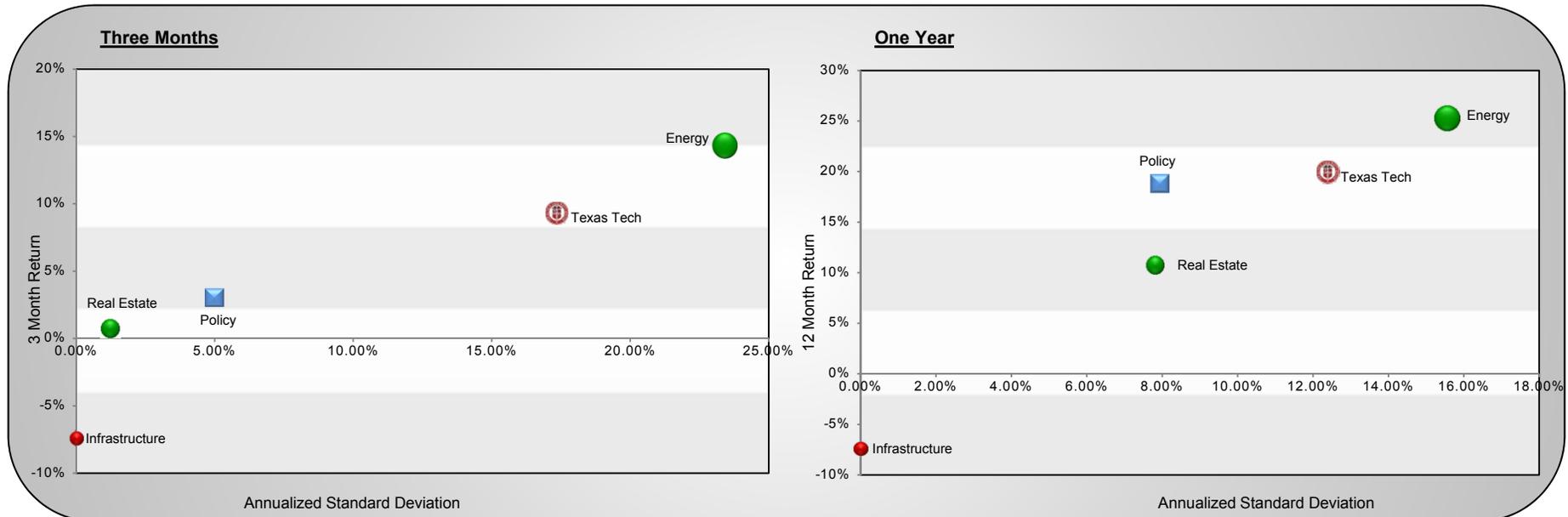
- Only twice in the past 25 years have new apartment buildings been going up as fast as they are right now. The first time was February 2000, right before the dot-com bubble burst. The second time was January 2006, right before the housing bubble burst.
- Monthly building data released earlier this week by the Census Bureau and the Department of Housing and Urban Development showed that new home construction overall posted strong gains in July, with the highest number of new home starts in eight months.
- The comeback largely manifested in an uptick in apartment buildings with five or more units, which saw an almost 50 percent increase in new starts in July over a year earlier. By comparison, starts on single-family homes were up only about 10 percent over the same period.



Source – Businessweek



Risk vs. Return (Strategy)



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Appendix I – Sub-Asset Detail

Fund	Current Exposure	MTD Perf.	3 Mo. Perf.	Calendar YTD	Fiscal YTD	Nacubo YTD	1 Year Perf.	3 Year Perf.	5 Year Perf.
TOTAL	1,038,501,553	-0.61%	3.31%	4.46%	13.71%	-0.61%	12.37%	8.02%	9.36%
Policy		-0.46%	2.29%	6.05%	14.41%	-0.46%	13.49%	8.72%	10.69%
Equity	329,288,312	-1.23%	3.15%	3.42%	16.75%	-1.23%	14.26%	11.20%	11.82%
US Equity	78,221,376	-1.97%	2.06%	2.72%	16.88%	-1.97%	13.64%	11.54%	12.42%
<i>Benchmark: S&P 500 Total Return</i>		-1.38%	3.02%	5.66%	20.43%	-1.38%	16.94%	16.84%	16.79%
Global Equity	81,783,568	-0.85%	5.42%	5.19%	22.53%	-0.85%	20.58%	19.18%	n/a
<i>Benchmark: MSCI ACWI</i>		-1.21%	2.79%	4.89%	18.38%	-1.21%	15.91%	10.41%	12.09%
Non US Developed Equity	48,598,806	-2.33%	0.72%	1.82%	17.08%	-2.33%	15.28%	8.77%	10.18%
<i>Benchmark: MSCI EAFE</i>		-1.96%	0.75%	3.08%	17.09%	-1.96%	15.55%	8.45%	9.88%
Non US Emerging Markets Equity	66,490,050	1.70%	6.91%	10.24%	18.52%	1.70%	15.17%	2.73%	6.46%
<i>Benchmark: MSCI EMF</i>		2.02%	8.45%	8.46%	17.70%	2.02%	15.72%	0.74%	7.68%
Alternative Equity	54,194,512	-2.56%	1.27%	-5.09%	3.78%	-2.56%	3.16%	25.64%	n/a
<i>Benchmark: MSCI ACWI</i>		-1.21%	2.79%	4.89%	18.38%	-1.21%	15.91%	10.41%	12.09%
Debt	219,964,962	-0.17%	2.95%	6.01%	10.09%	-0.17%	8.72%	7.28%	8.93%
Sovereign/Investment Grade Bonds	83,526,370	-0.11%	1.51%	3.28%	5.12%	-0.11%	3.97%	2.95%	n/a
<i>Benchmark: Barclays Global Aggregate</i>		-0.25%	0.94%	3.66%	4.50%	-0.25%	3.97%	3.04%	4.47%
Credit	66,706,042	-0.27%	1.15%	-1.02%	6.36%	-0.27%	6.62%	10.47%	11.66%
<i>Benchmark: Barclays Global Aggregate</i>		-0.25%	0.94%	3.66%	4.50%	-0.25%	3.97%	3.04%	4.47%
Emerging Markets Debt	69,732,550	-0.17%	5.24%	10.88%	15.82%	-0.17%	12.75%	8.23%	n/a
<i>Benchmark: JP Morgan EM Bond Index</i>		0.12%	3.93%	9.22%	13.17%	0.12%	10.13%	6.98%	9.79%
Liquid Real Assets	51,883,786	-4.70%	-3.45%	1.82%	-2.63%	-4.70%	0.72%	-8.56%	-0.33%
<i>Benchmark: CPI + 4%</i>		0.29%	1.50%	4.63%	5.66%	0.29%	6.14%	5.93%	6.19%
Cash & Alpha Pool	165,501,897	0.11%	1.21%	2.71%	6.15%	0.11%	5.90%	5.09%	4.56%
Cash*	(1,106,441)	0.11%	1.21%	0.00%	6.15%	0.11%	5.90%	5.09%	4.56%
<i>Benchmark: Citigroup 3 month Tbill</i>		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.04%	0.07%
Alpha Pool	166,608,338	0.18%	1.74%	4.47%	9.15%	0.18%	8.85%	7.64%	8.03%
<i>Benchmark: HFRI FOF Index</i>		-0.50%	1.56%	1.48%	6.65%	-0.50%	5.89%	2.96%	3.80%
Liquidating	11,048,474	0.06%	2.42%	-2.78%	4.84%	0.06%	3.13%	-0.37%	3.69%

*Cash is adjusted for synthetic exposures.



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Appendix I – Sub-Asset Detail (cont.)

Fund	Current Exposure	1 Year Performance	3 Year Performance	5 Year Performance
Private Investments	260,814,122	19.44%	11.77%	13.18%
<i>Benchmark: Private Market Index (90% VE, 10% NCREIF)</i>		18.10%	13.26%	10.89%
Private Equity	83,002,279	21.18%	11.62%	11.96%
Private Credit	76,206,716	16.49%	10.83%	13.41%
Private Real Assets	101,605,127	19.93%	12.51%	14.02%

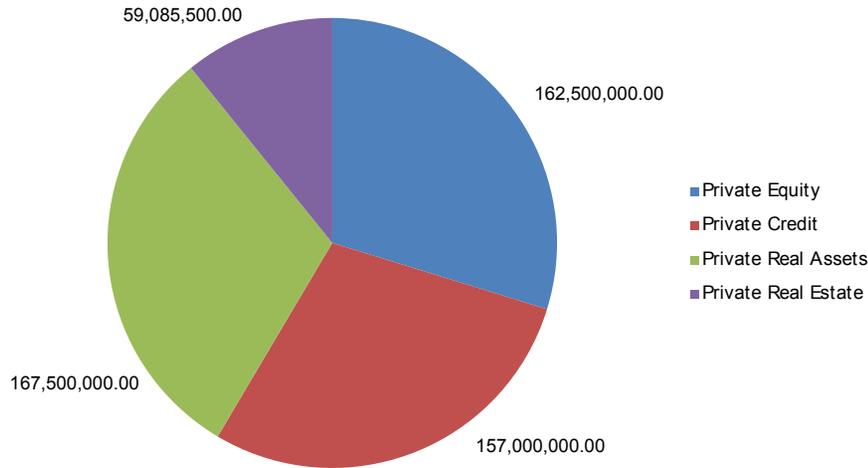
*Performance is calculated using time weighted Cash on Cash returns. This is an industry standard and allows direct comparison between manager returns and policy returns. IRR returns can be seen in appendix 2.



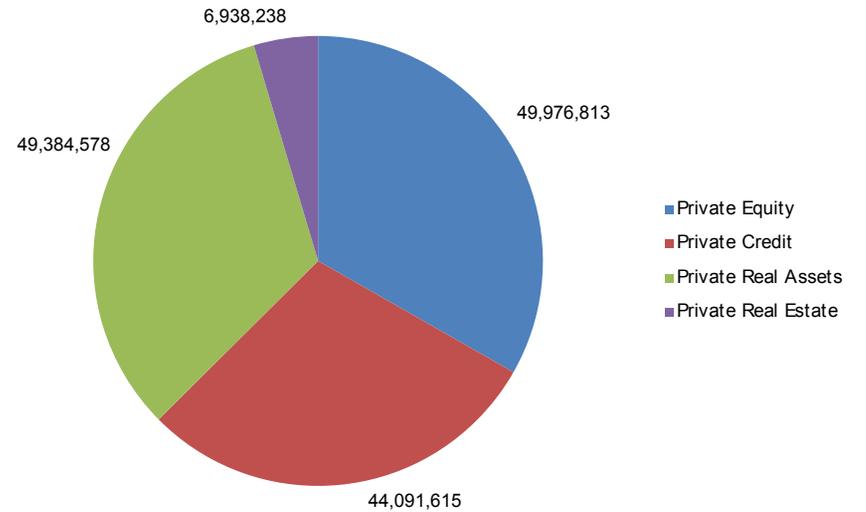
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Appendix II - Private Markets Report (as of June 2014) - Total Commitment

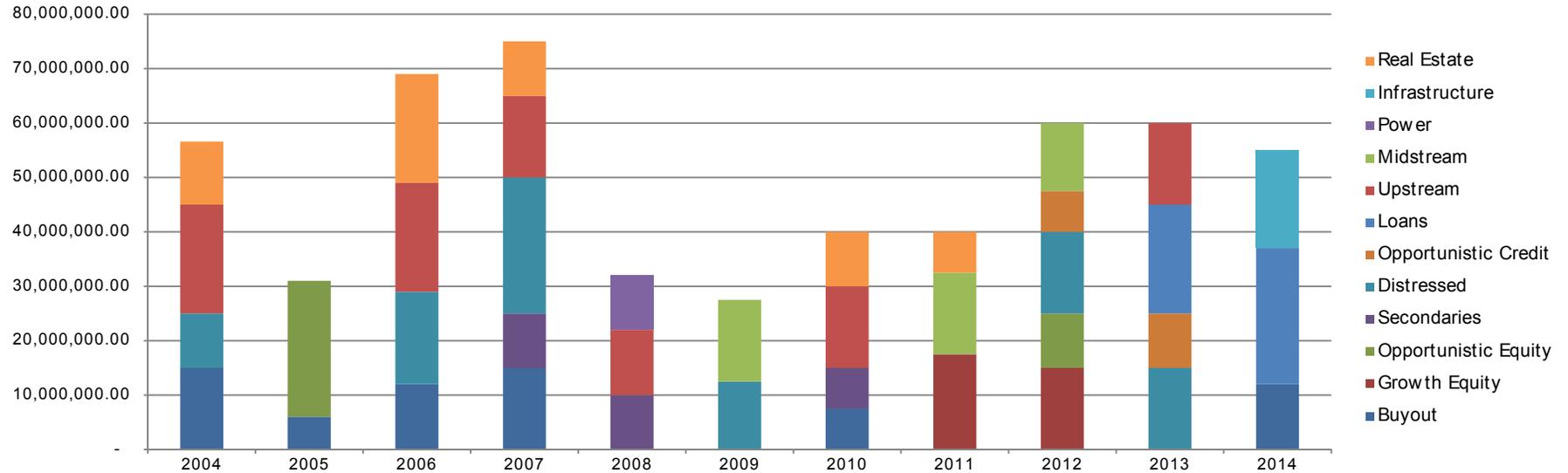
Total Commitment



Total Unfunded



Commitment by Vintage Year



Data Provided by Texas Tech University System
 Reported Valuations through March 31, 2014 Statements
 Adjusted Valuations included all cashflows through June 30, 2014

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Appendix II - Private Markets Report (as of June 2014) - Performance Analysis by Strategy Type & Asset Class
Performance by Strategy Type

Asset Class	Strategy	# of Funds	Commitment	Funded	Paid-In Capital	Distributions	% Drawn	Reported Valuation	Adjusted Valuation	IRR	MOC
Private Equity	Buyout	6	\$67,500,000	\$49,753,550	\$51,634,685	\$51,936,758	74%	\$37,556,892	\$33,350,597	15.12%	1.70
	Growth Equity	2	\$32,500,000	\$9,510,070	\$10,435,788	\$72,459	29%	\$9,610,971	\$10,529,443	1.16%	1.02
	Opportunistic	2	\$35,000,000	\$30,800,000	\$30,800,000	\$14,299,222	88%	\$19,690,343	\$20,039,855	2.70%	1.11
	Secondaries	3	\$27,500,000	\$20,539,747	\$20,914,754	\$10,669,108	75%	\$19,988,736	\$19,078,839	9.83%	1.42
	Total	13	\$162,500,000	\$110,603,367	\$113,785,227	\$76,977,547	68%	\$86,846,942	\$82,998,734	10.60%	1.44
Private Credit	Distressed	9	\$94,500,000	\$85,572,883	\$85,630,473	\$74,050,851	91%	\$50,293,514	\$47,557,803	13.10%	1.44
	Loans	2	\$45,000,000	\$17,272,219	\$17,272,219	\$0	38%	\$11,881,255	\$17,604,440	2.43%	1.02
	Opportunistic	2	\$17,500,000	\$9,158,840	\$10,221,374	\$1,203,873	52%	\$8,420,879	\$10,546,443	12.03%	1.15
	Total	13	\$157,000,000	\$112,003,942	\$113,124,066	\$75,254,724	71%	\$70,595,648	\$75,708,686	12.99%	1.35
Private Real Assets	Upstream	6	\$97,000,000	\$79,651,987	\$82,250,615	\$91,478,662	82%	\$31,294,963	\$28,126,365	26.87%	1.52
	Midstream	3	\$42,500,000	\$30,062,536	\$31,207,382	\$20,675,858	71%	\$23,125,162	\$26,019,870	34.65%	1.50
	Power	1	\$10,000,000	\$8,420,529	\$8,541,067	\$2,997,000	84%	\$2,838,698	\$3,027,410	-15.43%	0.71
	Infrastructure	1	\$18,000,000	\$10,370,929	\$10,370,929	\$0	58%	-	-	-	-
	Total	11	\$167,500,000	\$128,505,981	\$132,369,993	\$115,151,520	77%	\$57,258,823	\$57,173,645	25.52%	1.46
Private Real Estate	Value Add	3	\$31,585,500	\$28,824,136	\$28,875,743	\$22,210,443	91%	\$13,847,331	\$13,365,926	4.92%	1.23
	Opportunistic	3	\$27,500,000	\$23,112,611	\$23,323,126	\$3,192,059	84%	\$11,703,392	\$11,769,943	-9.65%	0.64
	Total	6	\$59,085,500	\$51,936,747	\$52,198,869	\$25,402,502	88%	\$25,550,723	\$25,135,869	-0.77%	0.97

Performance by Asset Class

Asset Class	# of Funds	Commitment	Funded	Paid-In Capital	Distributions	% Drawn	Reported Valuation	Adjusted Valuation	IRR	MOC
Private Equity	13	\$162,500,000	\$110,603,367	\$113,785,227	\$76,977,547	68%	\$86,846,942	\$82,998,734	10.60%	1.44
Private Credit	13	\$157,000,000	\$112,003,942	\$113,124,066	\$75,254,724	71%	\$70,595,648	\$75,708,686	12.99%	1.35
Private Real Assets	11	\$167,500,000	\$128,505,981	\$132,369,993	\$115,151,520	77%	\$57,258,823	\$57,173,645	25.52%	1.46
Private Real Estate	6	\$59,085,500	\$51,936,747	\$52,198,869	\$25,402,502	88%	\$25,550,723	\$25,135,869	-0.77%	0.97
Total	43	\$546,085,500	\$403,050,037	\$411,478,155	\$292,786,293	74%	\$240,252,136	\$241,016,934	12.18%	1.37



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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



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Appendix III – Glossary (cont.)

Investment Terms/Performance Statistics

Active Premium: A measure of the investment's annualized return minus the benchmark's annualized return

Alpha: Return generated by the manager that is not explained by the returns of the benchmark. A measure of a fund's performance beyond what its benchmark would predict

Annual Return: The annual rate at which an investment would have grown, if it had grown at a steady rate. Also called "Compound Annual Growth Rate" (CAGR), or the "Compound Rate of Return Annualized" (Compound RoR)

Annual Volatility: A statistical measure of the dispersion of returns around the average (mean) return. Often used as a measure of investment risk with a higher value indicating higher risk

Arbitrage: The simultaneous purchase and sale of an asset in order to profit from a difference in the price

Beta: A measure of the risk of the fund relative to the benchmark. Beta describes the sensitivity of the investment to benchmark movements where the benchmark is always assigned a beta of 1.0

Calmar Ratio: A return/risk ratio calculated over the last three year period as [annual compounded return / (Maximum Drawdown)]

Capital Commitment: Every investor in a private equity fund commits to investing a specified sum of money in the fund partnership over a specified period of time.

Capital Distribution: The returns that an investor in a private equity fund receives; the income and capital realized from investments less expenses and liabilities

Carried Interest: The share of profits that the fund manager is due once it has returned the cost of investment to investors

Catch up: A clause that allows the general partner to take, for a limited period of time, a greater share of the carried interest than would normally be allowed. This continues until the time when the carried interest allocation, as agreed in the limited partnership, has been reached.

Clawback: Ensures that a general partner does not receive more than its agreed percentage of carried interest over the life of the fund

Correlation: A measure between +1 and -1 that explains the degree to which the returns of the fund and a benchmark are related

Down Capture: Measures how much of the benchmark's return the fund captures when the benchmark is negative

Down Number: The percentage of the time the fund was down when the benchmark was down

Drawdown: When a private equity firm has decided where it would like to invest, it will approach its own investors in order to draw down the money. The money will already have been pledged to the fund but this is the actual act of transferring the money so that it reaches the investment target

Excess Kurtosis: Measures the distribution of observed data around the mean with an emphasis on "outlier" data, both positive and negative

Exit: The means by which a fund is able to realize its investment in a company – by an initial public offering, a trade sale, selling to another private equity firm or a company buy-back

Fundraising: The process by which a private equity firm solicits financial commitments from limited partners for a fund

General Partner: This can refer to the top-ranking partner(s) at a private equity firm as well as the firm managing the private equity fund



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Appendix III – Glossary (cont.)

Investment Terms/Performance Statistics (cont.)

Gross Exposure: Aggregate of long and short investment positions in relation to the Net Asset Value (NAV)

Holding Period: The length of time that an investment is held

Information Ratio: The Active Premium divided by the Tracking Error. This measure explicitly relates the degree by which an investment has beaten the benchmark to the consistency by which the investment has beaten the benchmark

Internal Rate of Return: A time-weighted return expressed as a percentage that uses the present sum of cash drawdowns (money invested), the present value of distributions (money returned from investments) and the current value of unrealized investments and applies a discount

Leverage: Increasing exposure to markets (both long and short) by borrowing or the use of derivatives

Limited Partnership: The standard vehicle for investment in private equity funds

Long Position: Owning a security

Management Fee: The annual fee paid to the general partner

Max Drawdown: The largest percentage loss of Net Asset Value (NAV) as measured from peak-to-trough

Net Exposure: Difference between the long and short positions, representing the exposure to market fluctuations

Preferred Return: This is the minimum amount of return that is distributed to the limited partners until the time when the general partner is eligible to deduct carried interest

Omega Ratio: The weighted gain/loss ratio relative to the average monthly historical return; captures the effects of extreme returns and conveys the preference for positive volatility versus negative volatility

Sharpe Ratio: A return/risk ratio calculated as: $[(\text{annual compounded return} - \text{risk-free rate}) / (\text{annual volatility of returns})]$

Skewness: A measure of the symmetry of return distribution, as compared with a normal (bell-shaped) distribution

Sortino Ratio: A return/risk ratio calculated as such: $[(\text{annual compounded return} - \text{minimum acceptable return (MAR)}) / (\text{downside deviation of returns below MAR})]$. This ratio was developed to differentiate between good (upside) and bad (downside) volatility

Standard Deviation: Measures the dispersal or uncertainty in a random variable (in this case, investment returns). It measures the degree of variation of returns around the mean (average) return

Short Position: Selling a security

Tracking Error: A measure of the unexplained portion of an investments performance relative to a benchmark

Up Capture: Measures the percentage of the benchmark's return the fund captures when the benchmark is positive

Up Number: The percentage of the time the fund was up when the benchmark was up

Value at Risk (VAR): The maximum loss that can be expected within a specified holding period with a specified confidence level