Asset class returns



															2004 - 2018		
2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Ann.	Vol.	
REITs	EM Equity	REITs	EM Equity	Fixed Income	EM Equity	REITs	REITs	REITs	Small Cap	REITs	REITs	Small Cap	EM Equity	Cash	REITs	REITs	
31.6%	34.5%	35.1%	39.8%	5.2%	79.0%	27.9%	8.3%	19.7%	38.8%	28.0%	2.8%	21.3%	37.8%	1.8%	8.5%	22.4%	
EM	Comdty.	EM	Comdty.	Cash	High	Small	Fixed	High	Large	Large	Large	High	DM	Fixed	EM	EM	
Equity 26.0%	21.4%	Equity 32.6%	16.2%	1.8%	Yield 59.4%	Cap 26.9%	Income 7.8%	Yield 19.6%	Cap 32.4%	Cap 13.7%	Cap 1.4%	Yield 14.3%	Equity 25.6%	Income 0.0%	Equity 8.3%	Equity 22.1%	
DM	DM	DM	DM		DM	EM	High	EM	DM	Fixed	Fixed					Small	
Equity	Equity	Equity	Equity	Asset A∰oc.	Equity	Equity	Yield	Equity	Equity	Income	Income	Large Cap	Large Cap	REITs	Large Cap	Cap	
20.7%	14.0%	26.9%	11.6%	-25.4%	32.5%	19.2%	3.1%	18.6%	23.3%	6.0%	0.5%	12.0%	21.8%	-4.0%	7.8%	18.6%	
Small	REITs	Small	Asset	High	REITs	Comdty.	Large	DM	Asset	Asset	Cash	Comdty.	Small	High	Small	Comdty.	
Cap 18.3%	12.2%	Cap 18.4%	Augoc. /1.1%	Yield - 26.9%	28.0%	16.8%	Cap 2.1%	Equity 17.9%	14.9%	AUC. 5.2%	0.0%	11.8%	Cap 14.6%	Y ie Id - 4 . 1%	Cap 7.5%	18.6%	
							2.176		High	Small		EM					
High Yield	Asset A∰oc.	Large Cap	Fixed Income	Small Cap	Small Cap	Large Cap	Cash	Small Cap	Yield	Cap	DM Equity	Equity	Asset Alec.	Large Cap	High Yield	DM Equity	
13.2%	8.1%	15.8%	7.0%	-33.8%	27.2%	15.1%	0.1%	16.3%	7.3%	4.9%	-0.4%	11.6%	14.6%	-4.4%	7.3%	17.6%	
Asset	Large	Asset	Large	Comdty.	Large	High	Asset	Large	REITs	Cash	Asset	REITs	High	Asset	Asset	Large	
Al a c. 12.8%	Cap 4.9%	ΑΠος. 15.3%	Cap 5.5%	-35.6%	Cap 26.5%	Y ie ld 14 . 8 %	A 0.7%	Cap 16.0%	2.9%	0.0%	A c.	8.6%	Yield 10.4%	Alec. -5.8%	Alloc. 6.2%	Cap 14.5%	
	Small	High	3.3 /8		Asset		Small		2.5 /6	High	High		10.4 /6	Small	DM		
Large Cap	Cap	Y ie ld	Cash	Large Cap	Alloc.	Asset Alloc.	Cap	Asset Alloc.	Cash	Yield	Yield	Asset Alloc.	REITs	Cap	Equity	High Yield	
10.9%	4.6%	13.7%	4.8%	-37.0%	25.0%	13.3%	-4.2%	12.2%	0.0%	0.0%	-2.7%	8.3%	8.7%	- 11.0%	5.2%	11.0%	
Comdty.	High	Cash	High	REITs	Comdty.	DM	DM	Fixed	Fixed	EM	Small	Fixed	Fixed	Comdtv.	Fixed	Asset	
9.1%	Yield 3.6%	4.8%	Yield 3.2%	-37.7%	18.9%	Equity 8.2%	Equity - 11.7%	Income 4.2%	Income - 2.0%	Equity - 1.8%	Cap -4.4%	Income 2.6%	Income 3.5%	- 11.2%	Income 3.9%	Alloc. 10.3%	
	3.6 /6						- 11.7 /0	4.2 /0					3.5 /6		3.9 /0		
Fixed Income	Cash	Fixed Income	Small Cap	DM Equity	Fixed Income	Fixed Income	Comdty.	Cash	EM Equity	DM Equity	EM Equity	DM Equity	Comdty.	DM Equity	Cash	Fixe d Income	
4.3%	3.0%	4.3%	- 1.6%	- 43.1%	5.9%	6.5%	- 13 . 3 %	0.1%	-2.3%	-4.5%	- 14 . 6 %	1.5%	1.7%	- 13 . 4 %	1.3%	3.3%	
Cash	Fixed	Comdty.	REITs	EM	Cash	Cash	EM	Comdty.	Comdty.	Comdty.	Comdty.	Cash	Cash	EM	Comdty.	Cash	
1.2%	Income 2.4%	2.1%	- 15.7%	Equity - 53.2%	0.1%	0.1%	Equity - 18.2%	- 1.1%	-9.5%	- 17.0%	-24.7%	0.3%	0.8%	Equity - 14.2%	-2.5%	0.8%	
1.2 %	2.4%	2.1%	- 15.7 %	- 55.2 %	0.1%	0.1%	- 10:2 %	- 1.176	- 9.5 %	- 17.0%	-24.7%	0.5%	0.6%	- 14.2 %	-2.5%	0.0%	

Source: Barclays, Bloomberg, FactSet, MSCI, NAREIT, Russell, Standard & Poor's, J.P. Morgan Asset Management. Large cap: S&P 500, Small cap: Russell 2000, EM Equity: MSCI EME, DM Equity: MSCI EAFE, Comdty: Bloomberg Commodity Index, High Yield: Bloomberg Barclays Global HY Index, Fixed Income: Bloomberg Barclays US Aggregate, REITs: NAREIT Equity REIT Index, Cash: Bloomberg Barclays 1-3m Treasury. The "Asset Allocation" portfolio assumes the following weights: 25% in the S&P 500, 10% in the Russell 2000, 15% in the MSCI EAFE, 5% in the MSCI EME, 25% in the Bloomberg Barclays US Aggregate, 5% in the Bloomberg Barclays 1-3m Treasury, 5% in the Bloomberg Barclays Global High Yield Index, 5% in the Bloomberg Commodity Index and 5% in the NAREIT Equity REIT Index. Balanced portfolio assumes annual rebalancing. Annualized (Ann.) return and volatility (Vol.) represents period of 12/31/03 – 12/31/18. Please see disclosure page at end for index definitions. All data represents total return for stated period. Past performance is not indicative of future returns. *Guide to the Markets – U.S.* Data are as of December 31, 2018.

