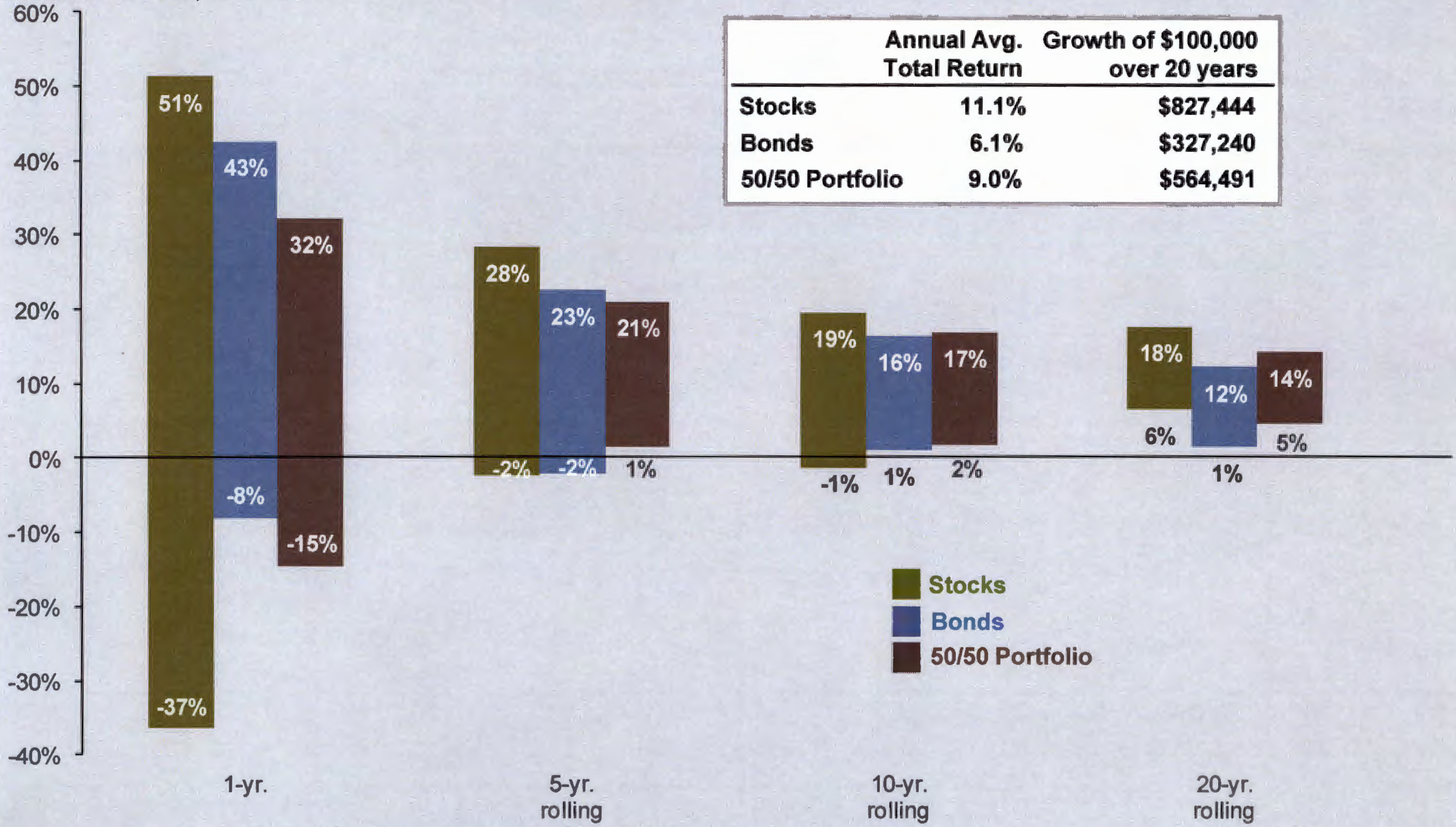
Historical Returns by Holding Period

Range of Stock, Bond and Blended Total Returns

Annual total returns, 1950 – 2013



	Annual Avg. Total Return	Growth of $100,000 over 20 years
Stocks	11.1%	$827,444
Bonds	6.1%	$327,240
50/50 Portfolio	9.0%	$564,491

Sources: Barclays Capital, FactSet, Robert Shiller, Strategas/Ibbotson, Federal Reserve, J.P. Morgan Asset Management.

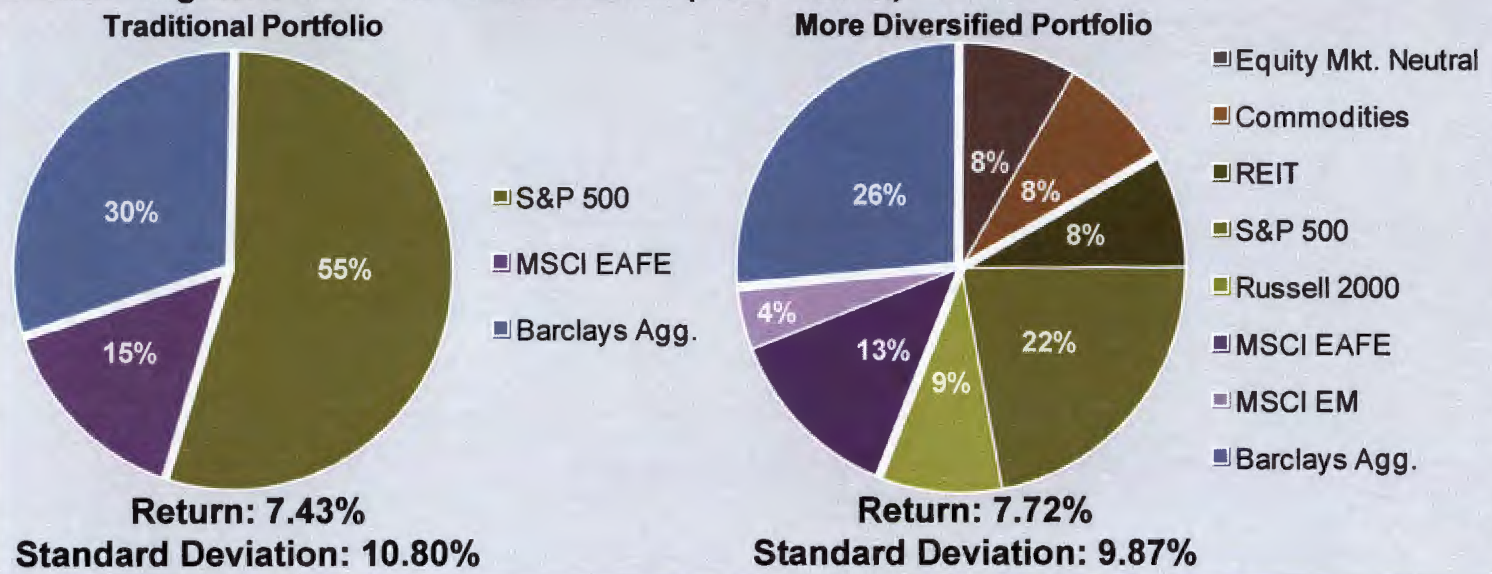
Returns shown are based on calendar year returns from 1950 to 2013. Growth of $100,000 is based on annual average total returns from 1950-2013. Guide to the Markets – U.S.

Data are as of 12/31/13.

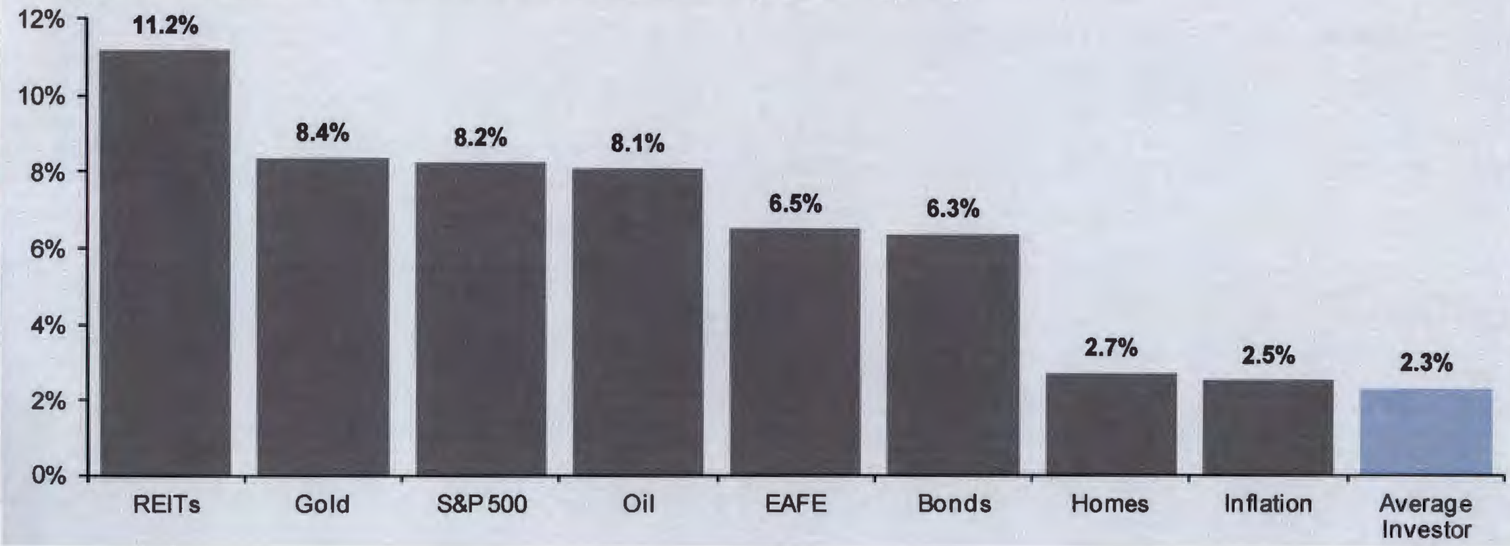
J.P.Morgan
Asset Management

Diversification and the Average Investor

Maximizing the Power of Diversification (1994 – 2012)



20-year Annualized Returns by Asset Class (1993 – 2012)



(Top) Indexes and weights of the traditional portfolio are as follows: U.S. Stocks: 55% S&P 500; U.S. Bonds: 30% Barclays Capital Aggregate; International Stocks: 15% MSCI EAFE. Portfolio with 25% in alternatives is as follows: U.S. Stocks: 22.2% S&P 500, 8.8% Russell 2000; International Stocks: 4.4% MSCI EM, 13.2% MSCI EAFE; U.S. Bonds: 26.5% Barclays Capital Aggregate; Alternatives: 8.3% CS/Tremont Equity Market Neutral: 8.3%, DJ/UBS Commodities: 8.3% NAREIT Equity REIT Index. Return and standard deviation calculated using Morningstar Direct.

Charts are shown for illustrative purposes only. Past performance is not indicative of future returns. Diversification does not guarantee investment returns and does not eliminate risk of loss. Data are as of 12/31/13. Guide to the Markets – U.S. J.P. Morgan Asset Management.

(Bottom) Indexes used are as follows: REITS: NAREIT Equity REIT Index, EAFE: MSCI EAFE, Oil: WTI Index, Bonds: Barclays Capital U.S. Aggregate Index, Homes: median sale price of existing single-family homes, Gold: USD/troy oz, Inflation: CPI. Average asset allocation investor return is based on an analysis by Dalbar Inc., which utilizes the net of aggregate mutual fund sales, redemptions and exchanges each month as a measure of investor behavior. Returns are annualized (and total return where applicable) and represent the 20-year period ending 12/31/12 to match Dalbar's most recent analysis.

J.P.Morgan Asset Management

J.P. Morgan Asset Management Long-term Capital Market Return Assumptions

As of September 30, 2013*

	Expected 10-15 year annualized compound returns (%)[1,2]		Rationale
U.S. ECONOMIC INDICATORS	Inflation	2.25	Significant slack in the economy overall, elevated levels of unemployment, ongoing deleveraging, and firmly anchored market expectations will keep inflation low overall. Reflationary central bank policies create the risk for higher inflation for the outer years of the projection horizon.
	Core Inflation	2.25	
	Real GDP	2.50	The cyclical picture continues to improve and economic momentum is improving, as secular challenges from an ageing population and rising entitlement costs become more pressing.
FIXED INCOME[2]	U.S. Cash	2.00	The Federal Reserve to keep policy rates on hold for an extended period and raise them only gradually thereafter. Real rates to remain low by historical standards.
	U.S. Intermediate Treasury[3]	4.25	Yield levels to stay contained in the near term before rising towards their higher equilibrium levels as monetary policy is eventually normalized. Dampened total returns due to both low income from the low level of yield and negative mark-to-market returns from rising rates.
	U.S. Long Treasury[4]	3.25	
	U.S. TIPS	4.75	TIPS to outperform nominal Treasuries as longer-term expected inflation rises only moderately from current levels.
	U.S. Aggregate	4.25	Spreads are expected to narrow somewhat, but total returns should remain exposed to rising overall yields broadly in line with Treasury rates; intermediate maturity securities benefit most from the curve roll-down.
	U.S. Short Duration Gov't/Credit	2.50	
	U.S. Long Duration Gov't/Credit	4.75	
	U.S. Investment Grade Corporate	5.00	
	U.S. Long Corporate	5.00	
	U.S. High Yield	6.00	Any further reduction in default rates and spread narrowing will provide only limited protection to offset the mark-to-market pressure from rising Treasury rates. Income is expected to be the driver of returns. Haircut applied to total returns for expected loss from defaults.
	U.S. Leveraged Loan (BB or better)	4.50	
	World Government Bond (local)	2.75	Government bond yields to rise globally from current levels, leading to negative mark-to-market returns during the period where rates converge to equilibrium. Outside the U.S., countries are likely to experience a prolonged period of lower rates and normalization due to slower economic growth.
	World ex-U.S. Government Bond (local)	2.50	
	World ex-U.S. Government Bond (hedged)	3.25	Higher U.S. cash yields compared to weighted average WGBI cash yields are expected to boost returns to U.S. investors.
	Emerging Markets Sovereign Debt (hedged)	6.75	Spreads have room to narrow, but total returns are at risk from rising U.S. Treasury yields given the long index duration.
	Emerging Markets Local Currency Sovereign Debt (unhedged)	7.00	Spreads are expected to narrow further, but total returns are expected to be constrained as overall yields rise with U.S. Treasury rates.
	Emerging Markets Corporate Debt (hedged)	6.25	Yields are expected to rise as inflation and real rates in emerging economies increase to their higher equilibrium levels over time. Total returns to be largely driven by income.
	U.S. Municipal (1-15 Blend)	3.75	Spreads are expected to narrow further, but total returns are expected to be constrained as overall yields rise with U.S. Treasury rates.
EQUITY[2]	U.S. Large Cap	7.50	Sum of below building blocks (nominal earnings per share growth + dividend yield + price-to-earnings return impact). Total returns are expected to recover over the long term as the corporate sector outperforms the domestic economy.
	U.S. Large Cap EPS Growth	4.50	Real corporate earnings growth remains robust as companies maintain cost discipline, while margins to drift gradually lower.
	U.S. Large Cap Dividend Yield	3.00	Dividend yield is expected to rise as companies favor payouts over new investment.
	U.S. Large Cap P/E Return Impact	zero	Valuation multiples approach more recent historical averages, but upside is limited due to secular pressures and limited headline growth.
	U.S. Mid Cap	7.75	Mid cap companies in particular are likely to benefit from acquisition activity by larger firms, especially given the significant cash build-up on large cap corporate balance sheets.
	U.S. Small Cap	7.50	
	U.S. Large Cap Value	7.75	Value is expected to outperform growth given starting valuations and more favorable sector concentrations.
	U.S. Large Cap Growth	7.25	
	Europe ex-U.K. Large Cap (local)	8.00	An earnings premium to nominal GDP is expected due to the large share of globally sourced revenues. Valuations to improve from depressed levels and dividend yields to rise moderately.
	Japan Large Cap (local)	4.75	Earnings to outperform the domestic economy given exposure to fast-growing overseas markets. Japan to remain a global underperformer given demographic challenges and the ongoing battle with deflation.
	U.K. Large Cap (local)	8.25	An earnings premium to nominal GDP is expected given support from foreign-sourced revenues. Tolerance for higher inflation to keep valuations in check, but dividend yields are expected to rise moderately.
	EAFE Equity (local)	7.50	Market capitalization weighted average of expectations for regional equity returns.
	EAFE Equity (unhedged)	7.75	Slight dollar depreciation against the weighted average of EAFE currencies is expected to boost returns to U.S. investors.
	Emerging Markets Equity (unhedged)	9.00	Overall more favorable demographics, policy flexibility and improved corporate governance should support long-run growth even with weaker economic fundamentals.
	Asia ex-Japan Equity (unhedged)	9.25	
	Global Equity (unhedged)	7.75	Market capitalization weighted average of expectations for regional equity returns.
ALTERNATIVE/OTHER[2]	U.S. Private Equity[5,6]	8.00	Median manager returns assumed to be in line with mid cap equity. Sizeable divergence expected across private investments.
	U.S. Direct Real Estate (unlevered)[5,6]	6.00	Appreciation of real estate assets, lower intial property yields and low nominal GDP expectations reduce return expectation by 0.50% per annum from 2013 estimates.
	U.S. Value Added Real Estate (unlevered)[5,6]	7.75	A real estate risk assumption between core and opportunistic, seeking to enhance cash flows, occupancy, and building renovation; historically has given a higher yield compared to core.
	European Real Estate (unlevered, local)[5,6]	6.00	European real estate, with low nominal GDP growth, to produce muted return expectations.
	U.S. REITs	6.75	Solid REIT performance and a slight NAV premium to direct unlevered real estate results in REIT returns that are broadly in line with the real asset return.
	Global Infrastructure[5,6]	7.25	Expectations for returns are based on continued interest in infrastructure cash flows with good visibility and the benefit of leverage for low risk "bondable" assets.
	Hedge Fund—Diversified[5,6]	5.25	Expected hedge fund returns are based on multi-variate regressions to public markets. A blend of emerging market, commodities, small cap and U.S. aggregate bond betas to be the main driver of median manager expected returns. Sizeable divergences are expected among managers.
	Hedge Fund—Event Driven[5,6]	6.00	Blend of emerging market, commodities, mid cap, small cap, U.S. high yield and cash betas to be the main driver of median manager expected returns. Sizeable divergences are expected among managers.
	Hedge Fund—Long Bias[5,6]	6.25	Blend of commodities, emerging market equity, and large and small cap betas to be the main driver of median manager expected returns. Sizeable divergences are expected among managers.
	Hedge Fund—Relative Value[5,6]	4.75	Blend of emerging market credit, commodities, U.S. high yield and investment grade bond betas to be the main driver of median manager expected returns. Sizeable divergences are expected among managers.
	Hedge Fund—Macro[5,6]	5.25	Blend of commodities, emerging market equity and cash betas to be the main driver of median manager expected returns. Sizeable divergences are expected among managers.
	Commodities (spot)[5]	3.75	Return expectation is based on the growth of nominal global GDP. Returns to be less robust, reflecting large supply/demand challenges.
	Gold (spot)	4.25	Expected return is based on the historical relationship with inflation expectations, the U.S. dollar and emerging markets.

* Data as of September 30, 2013, except hedge funds (diversified, event driven, long bias, and relative value) as of June 30, 2013 and hedge fund (macro) as of May 31, 2013.

[1] Return estimates are on a compound or internal rate of return (IRR) basis. Equivalent arithmetic averages, as well as further information, are shown on the following page.

[2] All asset class assumptions are in total return terms, including equity return assumptions. All returns are in U.S. dollar terms unless otherwise indicated.

[3] U.S. Intermediate Treasury returns based on Barclays Capital U.S. Treasury: 7-10 Year Index.

[4] U.S. Long Treasury returns based on Barclays Capital U.S. Treasury: 20+ Year Index.

[5] Private equity, hedge funds, real estate, infrastructure and commodities are unlike other asset categories shown above in that there is no underlying investible index. Hedge fund returns are shown net of manager fees.

[6] The return estimates shown for these asset classes and strategies are our estimates of industry medians—the dispersion of returns among managers in these asset classes and strategies is typically far wider than for traditional asset classes.

See additional notes on the following page.

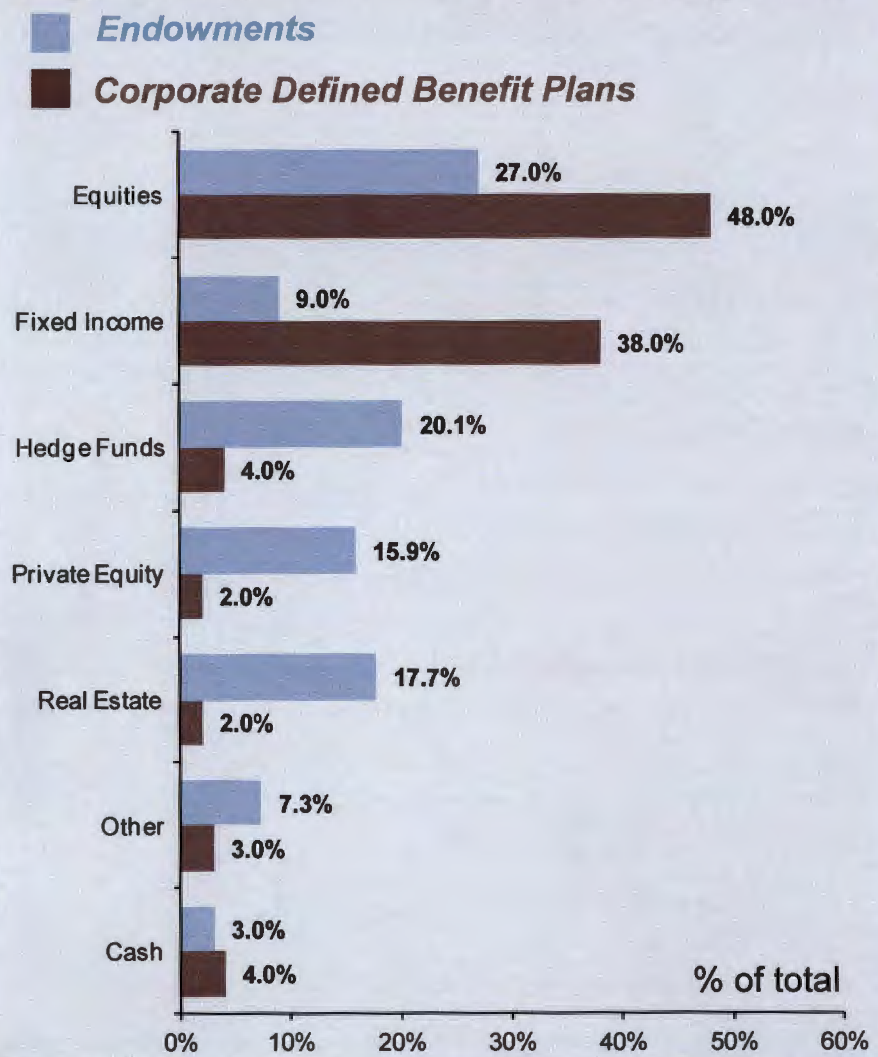
Correlation Matrix

		Expected arithmetic return (%)[2]	Expected compound return (%)[2]	Expected annualized volatility (%)[2]	U.S. Inflation	U.S. Cash	U.S. Intermediate Treasury[3]	U.S. Long Treasury[4]	U.S. TIPS	U.S. Aggregate	U.S. Short Duration Gov't/Credit	U.S. Long Duration Gov't/Credit	U.S. Investment Grade Corporate	U.S. Long Corporate	U.S. High Yield	U.S. Leveraged Loan	World Government Bond (hedged)	World Government Bond (unhedged)	World ex-U.S. Government Bond (hedged)	World ex-U.S. Government Bond (unhedged)	Emerging Markets Sovereign Debt (unhedged)	Emerging Markets Local Currency Sovereign Debt (unhedged)	Emerging Markets Corporate Debt (unhedged)	U.S. Municipal (1-15 Blend)	U.S. Municipal High Yield	U.S. Large Cap	U.S. Mid Cap	U.S. Small Cap	U.S. Large Cap Value	U.S. Large Cap Growth	Europe ex-U.K. Large Cap (unhedged)	Japan Large Cap (unhedged)	U.K. Large Cap (unhedged)	EAFE Equity (hedged)	EAFE Equity (unhedged)	Emerging Markets Equity (unhedged)	Asia ex-Japan Equity (unhedged)	Global Equity (unhedged)	U.S. Private Equity[5,6]	U.S. Direct Real Estate (unlevered)[5,6]	U.S. Value Added Real Estate (unlevered)[5,6]	European Direct Real Estate (unlevered)[5,6]	U.S. REITs	Global Infrastructure[5,6]	Hedge Fund–Diversified[5,6]	Hedge Fund–Event Driven[5,6]	Hedge Fund–Long Bias[5,6]	Hedge Fund–Relative Value[5,6]	Hedge Fund–Macro[5,6]	Commodities (spot)[5]	Gold (spot)
	U.S. Inflation	2.26	2.25	1.50	1.00																																														
FIXED INCOME	U.S. Cash	2.00	2.00	0.50	0.09	1.00																																												
	U.S. Intermediate Treasury[3]	4.45	4.25	6.50	-0.30	0.03	1.00																																										
	U.S. Long Treasury[4]	4.11	3.25	13.50	-0.33	0.01	0.89	1.00																																									
	U.S. TIPS	4.97	4.75	6.75	0.05	-0.02	0.62	0.47	1.00																																								
	U.S. Aggregate	4.35	4.25	4.50	-0.26	0.00	0.87	0.77	0.77	1.00																																							
	U.S. Short Duration Gov't/Credit	2.52	2.50	2.00	-0.20	0.27	0.67	0.44	0.61	0.76	1.00																																						
	U.S. Long Duration Gov't/Credit	5.18	4.75	9.50	-0.31	-0.05	0.84	0.87	0.66	0.92	0.56	1.00																																					
	U.S. Investment Grade Corporate	5.23	5.00	7.00	-0.24	-0.09	0.53	0.47	0.64	0.82	0.61	0.79	1.00																																				
	U.S. Long Corporate	5.67	5.00	12.00	-0.28	-0.10	0.58	0.61	0.60	0.83	0.50	0.87	0.93	1.00																																			
	U.S. High Yield	6.75	6.00	12.75	-0.04	-0.10	-0.06	-0.12	0.39	0.33	0.18	0.28	0.62	0.58	1.00																																		
	U.S. Leveraged Loan (BB or better)	5.00	4.50	10.25	0.13	-0.07	-0.19	-0.22	0.27	0.13	-0.02	0.12	0.41	0.37	0.75	1.00																																	
	World Government Bond (hedged)	3.29	3.25	3.00	-0.35	0.06	0.88	0.83	0.49	0.80	0.63	0.78	0.51	0.56	-0.07	-0.24	1.00																																
	World Government Bond (unhedged)	3.49	3.25	7.00	-0.12	0.05	0.59	0.46	0.62	0.67	0.64	0.56	0.54	0.52	0.27	-0.06	0.56	1.00																																
	World ex-U.S. Government Bond (hedged)	3.29	3.25	3.00	-0.33	0.05	0.77	0.73	0.39	0.71	0.54	0.71	0.47	0.52	-0.04	-0.22	0.95	0.51	1.00																														
	World ex-U.S. Government Bond (unhedged)	3.58	3.25	8.25	-0.08	0.04	0.48	0.35	0.57	0.59	0.58	0.48	0.51	0.48	0.31	-0.02	0.47	0.96	0.43	1.00																													
	Emerging Markets Sovereign Debt (hedged)	7.41	6.75	12.00	-0.12	-0.04	0.37	0.24	0.65	0.67	0.44	0.58	0.76	0.73	0.75	0.50	0.32	0.52	0.30	0.52	1.00																														
	Emerging Markets Local Currency Sovereign Debt (unhedged)	7.69	7.00	12.25	0.03	0.05	0.12	0.01	0.47	0.40	0.31	0.31	0.54	0.49	0.67	0.32	0.11	0.56	0.12	0.60	0.80	1.00																													
	Emerging Markets Corporate Debt (hedged)	6.86	6.25	11.50	-0.06	-0.08	0.27	0.14	0.61	0.59	0.39	0.51	0.77	0.70	0.74	0.63	0.19	0.40	0.17	0.40	0.90	0.69	1.00																												
	U.S. Municipal (1-15 Blend)	3.83	3.75	4.00	-0.13	-0.04	0.49	0.38	0.50	0.63	0.48	0.54	0.58	0.51	0.30	0.24	0.49	0.36	0.47	0.32	0.48	0.24	0.40	1.00																											
	U.S. Municipal High Yield	5.77	5.25	10.50	0.17	-0.07	-0.04	-0.11	0.33	0.19	0.06	0.12	0.29	0.21	0.36	0.48	-0.04	0.04	-0.01	0.06	0.40	0.24	0.46	0.61	1.00																										
EQUITY	U.S. Large Cap	8.49	7.50	14.75	0.08	-0.06	-0.26	-0.31	0.18	0.04	-0.05	-0.02	0.30	0.24	0.71	0.44	-0.27	0.19	-0.23	0.26	0.55	0.67	0.55	0.04	0.27	1.00																									
	U.S. Mid Cap	9.17	7.75	17.75	0.11	-0.07	-0.29	-0.33	0.20	0.03	-0.07	-0.02	0.31	0.26	0.74	0.50	-0.29	0.14	-0.25	0.21	0.56	0.66	0.57	0.06	0.29	0.96	1.00																								
	U.S. Small Cap	9.24	7.50	19.75	0.08	-0.08	-0.31	-0.34	0.10	-0.04	-0.13	-0.08	0.21	0.18	0.69	0.41	-0.31	0.10	-0.26	0.18	0.48	0.63	0.47	-0.02	0.20	0.92	0.94	1.00																							
	U.S. Large Cap Value	8.84	7.75	15.50	0.07	-0.05	-0.24	-0.28	0.16	0.05	-0.04	0.00	0.30	0.25	0.69	0.40	-0.23	0.21	-0.19	0.27	0.55	0.67	0.55	0.03	0.25	0.96	0.94	0.92	1.00																						
	U.S. Large Cap Growth	8.27	7.25	15.00	0.09	-0.07	-0.28	-0.34	0.20	0.02	-0.07	-0.04	0.29	0.23	0.71	0.48	-0.30	0.15	-0.26	0.22	0.53	0.64	0.54	0.05	0.28	0.96	0.95	0.91	0.93	1.00																					
	Europe ex-U.K. Large Cap (unhedged)	9.20	7.75	18.00	0.06	0.03	-0.23	-0.28	0.21	0.09	0.05	0.03	0.36	0.30	0.72	0.42	-0.21	0.36	-0.17	0.44	0.61	0.77	0.57	0.04	0.24	0.89	0.87	0.81	0.89	0.87	1.00																				
	Japan Large Cap (unhedged)	7.99	6.75	16.50	0.05	-0.03	-0.11	-0.12	0.22	0.16	0.08	0.13	0.40	0.35	0.57	0.39	-0.11	0.26	-0.09	0.30	0.52	0.61	0.49	0.03	0.18	0.65	0.65	0.61	0.65	0.62	0.69	1.00																			
	U.K. Large Cap (unhedged)	9.45	8.00	18.00	0.12	0.00	-0.29	-0.35	0.20	0.05	0.00	-0.01	0.37	0.29	0.68	0.48	-0.28	0.28	-0.24	0.36	0.58	0.72	0.60	0.06	0.35	0.87	0.85	0.76	0.86	0.85	0.93	0.67	1.00																		
	EAFE Equity (hedged)	8.70	7.75	14.50	0.04	0.01	-0.35	-0.34	0.05	-0.02	-0.12	-0.03	0.31	0.27	0.69	0.52	-0.30	0.02	-0.23	0.09	0.53	0.62	0.53	0.01	0.29	0.88	0.88	0.82	0.87	0.87	0.88	0.75	0.87	1.00																	
	EAFE Equity (unhedged)	9.24	7.75	18.25	0.07	0.01	-0.22	-0.27	0.24	0.12	0.05	0.06	0.41	0.35	0.73	0.46	-0.21	0.35	-0.17	0.42	0.64	0.79	0.62	0.06	0.28	0.89	0.88	0.81	0.88	0.87	0.96	0.77	0.94	0.90	1.00																
	Emerging Markets Equity (unhedged)	11.50	9.00	24.00	0.07	0.07	-0.18	-0.24	0.31	0.15	0.08	0.08	0.39	0.34	0.70	0.45	-0.19	0.30	-0.16	0.36	0.66	0.81	0.63	0.07	0.29	0.80	0.82	0.76	0.77	0.81	0.86	0.67	0.85	0.82	0.89	1.00															
	Asia ex-Japan Equity (unhedged)	11.50	9.25	22.75	0.01	0.06	-0.16	-0.22	0.28	0.17	0.09	0.11	0.43	0.38	0.72	0.46	-0.15	0.28	-0.11	0.34	0.64	0.78	0.62	0.09	0.28	0.78	0.79	0.73	0.75	0.79	0.84	0.63	0.82	0.81	0.87	0.95	1.00														
	Global Equity (unhedged)	9.01	7.75	16.75	0.08	0.00	-0.25	-0.30	0.24	0.09	0.01	0.03	0.38	0.32	0.75	0.48	-0.25	0.28	-0.21	0.35	0.63	0.77	0.62	0.05	0.29	0.94	0.93	0.88	0.93	0.93	0.95	0.73	0.93	0.91	0.96	0.90	0.88	1.00													
ALTERNATIVE/OTHER	U.S. Private Equity[5,6]	10.13	8.00	22.00	0.12	-0.12	-0.37	-0.39	0.10	-0.07	-0.13	-0.11	0.22	0.17	0.67	0.44	-0.35	0.08	-0.30	0.16	0.44	0.61	0.47	-0.02	0.30	0.90	0.93	0.95	0.89	0.89	0.80	0.64	0.77	0.82	0.81	0.76	0.74	0.87	1.00												
	U.S. Direct Real Estate (unlevered)[5,6]	6.67	6.00	12.00	0.06	-0.02	0.00	-0.01	0.16	0.15	0.05	0.12	0.20	0.21	0.38	0.20	0.02	0.16	0.03	0.17	0.31	0.33	0.24	0.11	0.13	0.35	0.39	0.39	0.38	0.32	0.31	0.27	0.28	0.29	0.32	0.27	0.26	0.33	0.35	1.00											
	U.S. Value Added Real Estate (unlevered)[5,6]	8.84	7.75	15.50	0.06	-0.01	-0.05	-0.07	0.13	0.10	0.04	0.07	0.17	0.17	0.35	0.19	-0.03	0.15	-0.02	0.18	0.29	0.33	0.24	0.07	0.13	0.35	0.37	0.37	0.37	0.33	0.35	0.27	0.33	0.32	0.35	0.30	0.29	0.36	0.34	0.70	1.00										
	European Direct Real Estate (unlevered)[5,6]	6.89	5.75	15.75	0.07	-0.02	-0.06	-0.10	0.14	0.09	0.08	0.04	0.14	0.12	0.27	0.15	-0.03	0.20	0.00	0.23	0.29	0.32	0.25	0.02	0.16	0.28	0.28	0.27	0.31	0.24	0.35	0.22	0.34	0.27	0.34	0.26	0.23	0.31	0.27	0.50	0.50	1.00									
	U.S. REITs	8.55	6.75	20.00	0.09	-0.04	-0.06	-0.09	0.28	0.22	0.07	0.17	0.36	0.36	0.72	0.39	-0.05	0.27	-0.02	0.31	0.58	0.64	0.49	0.17	0.25	0.77	0.79	0.79	0.80	0.72	0.69	0.56	0.64	0.66	0.69	0.61	0.59	0.74	0.73	0.60	0.48	0.34	1.00								
	Global Infrastructure[5,6]	7.97	7.25	12.50	0.10	0.00	0.19	0.15	0.30	0.29	0.18	0.25	0.27	0.27	0.30	0.15	0.16	0.26	0.14	0.25	0.34	0.32	0.29	0.18	0.13	0.29	0.30	0.29	0.31	0.27	0.26	0.23	0.23	0.21	0.27	0.24	0.23	0.28	0.25	0.28	0.21	0.15	0.45	1.00							
	Hedge Fund–Diversified[5,6]	5.45	5.25	6.50	0.22	0.11	-0.33	-0.36	0.19	-0.03	-0.06	-0.06	0.26	0.19	0.50	0.46	-0.34	0.06	-0.29	0.13	0.41	0.55	0.47	0.03	0.42	0.67	0.71	0.62	0.63	0.71	0.71	0.62	0.77	0.76	0.76	0.80	0.75	0.77	0.69	0.14	0.20	0.23	0.39	0.12	1.00						
	Hedge Fund–Event Driven[5,6]	6.30	6.00	8.00	0.21	0.00	-0.38	-0.43	0.18	-0.04	-0.09	-0.09	0.29	0.21	0.64	0.51	-0.38	0.09	-0.32	0.17	0.48	0.62	0.56	0.02	0.46	0.82	0.85	0.79	0.79	0.83	0.81	0.64	0.85	0.83	0.85	0.83	0.79	0.87	0.85	0.26	0.30	0.31	0.59	0.20	0.91	1.00					
	Hedge Fund–Long Bias[5,6]	6.72	6.25	10.00	0.15	0.02	-0.36	-0.42	0.19	-0.02	-0.03	-0.09	0.31	0.23	0.67	0.49	-0.37	0.14	-0.33	0.22	0.53	0.69	0.57	0.00	0.35	0.86	0.88	0.83	0.84	0.88	0.87	0.70	0.89	0.88	0.90	0.91	0.87	0.93	0.86	0.25	0.29	0.26	0.60	0.20	0.89	0.93	1.00				
	Hedge Fund–Relative Value[5,6]	4.92	4.75	6.00	0.25	-0.02	-0.28	-0.34	0.32	0.11	0.03	0.05	0.43	0.35	0.70	0.66	-0.31	0.06	-0.27	0.12	0.58	0.60	0.66	0.17	0.54	0.70	0.75	0.64	0.67	0.73	0.71	0.60	0.78	0.76	0.76	0.78	0.75	0.78	0.71	0.24	0.27	0.28	0.53	0.20	0.86	0.90	0.85	1.00			
	Hedge Fund–Macro[5,6]	5.74	5.25	10.25	-0.02	0.19	-0.02	-0.04	0.19	0.08	0.20	0.05	0.16	0.13	0.12	-0.03	0.00	0.38	0.01	0.41	0.18	0.39	0.12	0.02	0.09	0.25	0.25	0.21	0.24	0.26	0.37	0.38	0.39	0.28	0.42	0.50	0.45	0.38	0.25	0.02	0.07	0.07	0.11	0.04	0.59	0.41	0.49	0.30	1.00		
	Commodities (spot)[5]	5.34	3.75	18.50	0.24	0.07	-0.13	-0.22	0.33	0.08	0.13	0.01	0.25	0.20	0.38	0.25	-0.20	0.31	-0.21	0.37	0.41	0.54	0.45	-0.08	0.15	0.49	0.52	0.42	0.47	0.50	0.56	0.39	0.65	0.45	0.60	0.64	0.57	0.60	0.43	0.13	0.18	0.20	0.33	0.15	0.63	0.59	0.66	0.59	0.55	1.00	
	Gold (spot)	5.91	4.25	19.00	0.03	0.09	0.25	0.11	0.45	0.32	0.34	0.22	0.25	0.22	0.15	0.07	0.13	0.48	0.08	0.48	0.39	0.44	0.38	0.15	0.12	0.11	0.13	0.10	0.11	0.12	0.18	0.16	0.21	0.01	0.22	0.34	0.28	0.21	0.09	0.07	0.07	0.09	0.13	0.13	0.26	0.19	0.27	0.23	0.49	0.52	1.00

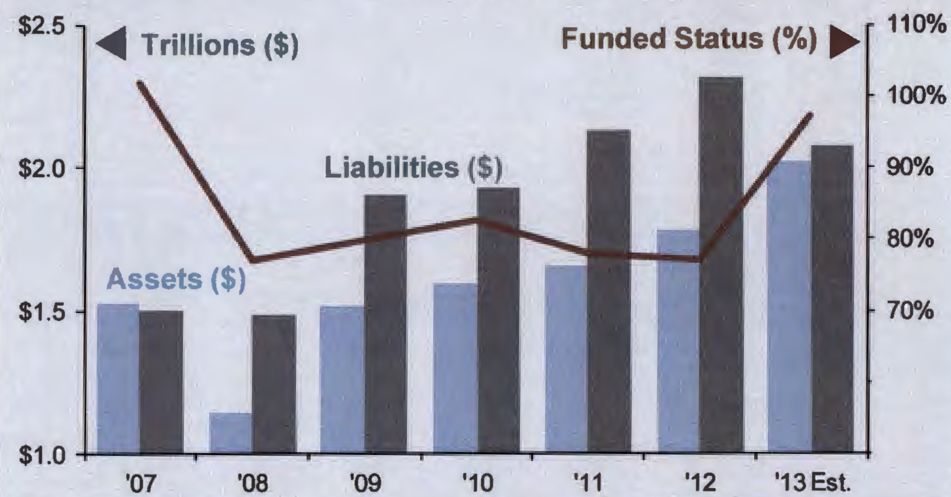
Note: All estimates on this page are in U.S. dollar terms. Given the complex risk-reward trade-offs involved, we advise clients to rely on judgment as well as quantitative optimization approaches in setting strategic allocations to all the above asset classes and strategies. Please note that all information shown is based on qualitative analysis. Exclusive reliance on the above is not advised. This information is not intended as a recommendation to invest in any particular asset class or strategy or as a promise of future performance. Note that these asset class and strategy assumptions are passive only-they do not consider the impact of active management. References to future returns are not promises or even estimates of actual returns a client portfolio may achieve. Assumptions, opinions and estimates are provided for illustrative purposes only. They should not be relied upon as recommendations to buy or sell securities. Forecasts of financial market trends that are based on current market conditions constitute our judgment and are subject to change without notice. We believe the information provided here is reliable, but do not warrant its accuracy or completeness. This material has been prepared for information purposes only and is not intended to provide, and should not be relied on for, accounting, legal or tax advice. See footnotes on the prior page.

Corporate DB Plans and Endowments

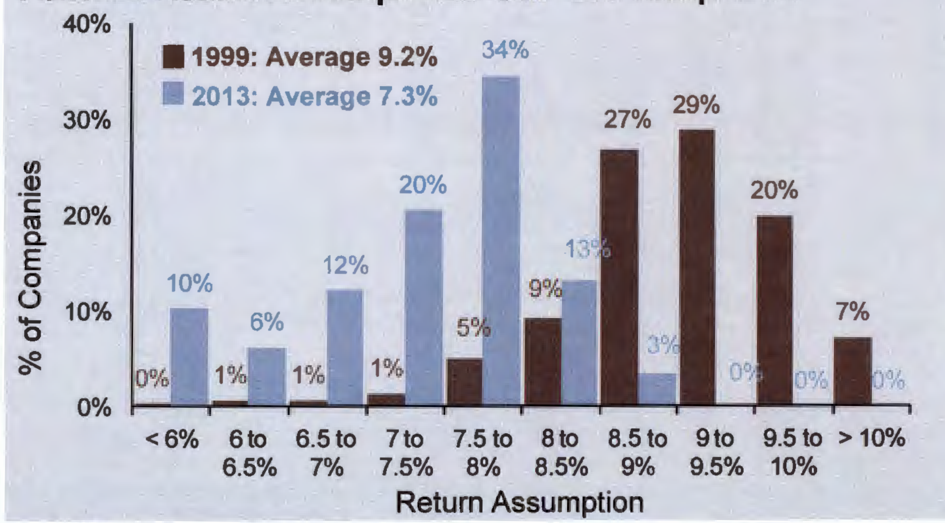
Asset Allocation: Corporate DB Plans vs. Endowments



Defined Benefit Plans: Russell 3000 Companies



Pension Return Assumptions: S&P 500 companies



Source: NACUBO (National Association of College and University Business Officers), Towers Watson, Compustat/FactSet, J.P. Morgan Asset Management. Asset allocation as of 2012. Funded status for 2013 estimated using 2013 market returns. Endowments represents dollar-weighted average data of 842 colleges and universities. Pension Return Assumptions based on all available and reported data from S&P 500 Index companies. Pension Assets, Liabilities and Funded Status based on Russell 3000 companies reporting pension data. Return assumption bands are inclusive of upper range. All information is shown for illustrative purposes only. Guide to the Markets – U.S. Data are as of 12/31/13.

J.P.Morgan
Asset Management