



J.P. Morgan Asset Management

# Long-term Capital Market Return Assumptions

AS OF NOVEMBER 30, 2010

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**J.P.Morgan**  
Asset Management

| Expected 10-15 year annualized compound returns <sup>1,2</sup> (%) |   | Rationale  |  |
|--|---|--|--|
| U.S. ECONOMIC INDICATORS   | Inflation   | 3.00   | High unemployment and deleveraging of the private and public sectors to keep inflation low in the near-term. Aggressive reflationary central bank policy suggests materially higher inflation over the medium to longer term. Stronger growth and currency appreciation in the emerging economies should drive commodity prices higher, causing headline inflation to outstrip core. |
|  | Core Inflation  | 2.50   |  |
|  | Real GDP  | 2.50   | Private and public sector deleveraging, a higher Federal debt burden and slowing labor force expansion to place constraints on economic growth.  |
| FIXED INCOME <sup>2</sup>  | U.S. Cash   | 2.50   | Policy rates to eventually rise from today's extraordinarily low levels, but Federal Reserve to keep real rates close to zero in order to stimulate higher inflation.  |
|  | U.S. Intermediate Treasury <sup>3</sup>                 | 3.00   | Yields to rise towards a higher equilibrium nominal rate as inflation eventually rises and federal debt levels increase. The resulting capital loss to constrain total returns.  |
|  | U.S. Long Treasury <sup>4</sup>                         | 3.25   |  |
|  | U.S. TIPS   | 3.75   | TIPS to outperform nominal Treasuries as expected inflation rises from current levels.   |
|  | U.S. Aggregate  | 3.75   | Moderate further spread narrowing expected, but total returns to be constrained as overall yields rise with Treasury rates.  |
|  | U.S. Long Duration Gov't/Credit                         | 4.50   |  |
|  | U.S. Investment Grade Corporate                         | 4.75   |  |
|  | U.S. Long Corporate                                     | 5.50   |  |
|  | U.S. High Yield   | 6.50   | Further narrowing in spreads expected, but offset by higher Treasury rates. Haircut applied to total returns for expected defaults.  |
|  | World Government Bond (local)                           | 2.25   | Government bond yields to rise globally from current levels leading to capital losses as rates converge to equilibrium.  |
|  | World ex-U.S. Government Bond (local)                   | 2.00   |  |
|  | World ex-U.S. Government Bond                           | 2.75   | Dollar depreciation against weighted average of WGBI currencies expected to boost returns to U.S. investors.   |
|  | Emerging Market Sovereign Debt                          | 6.25   | Spreads currently close to equilibrium, but total returns constrained as overall yields rise with U.S. Treasury rates.   |
|  | Emerging Market Local Currency Sovereign Debt           | 6.50   | Yields currently close to equilibrium, with emerging economy inflation to remain moderate. Total returns to come largely from income.  |
| Emerging Market Corporate Debt                                     | 6.50  | Moderate further spread narrowing expected, but total returns to be constrained as overall yields rise with Treasury rates.  |  |
| U.S. Municipal   | 3.00  | Yield ratio versus Treasuries to be little changed as impact of deteriorating local government finances offsets the effect of expected future increases in Federal tax rates.  |  |
| EQUITY <sup>2</sup>  | U.S. Large Cap  | 7.75   | Sum of below building blocks (Nominal EPS growth + Dividend Yield + P/E return impact). Total returns close to norms of pre-crisis years as relatively weak nominal earnings growth is offset by improvement in valuation from today's historically attractive levels.   |
|  | U.S. Large Cap EPS Growth                               | 5.25   | Earnings growth rate expected to exceed nominal GDP as companies maintain cost discipline and continue to benefit from foreign-sourced revenues.   |
|  | U.S. Large Cap Dividend Yield                           | 2.50   | Dividend yields to rise slightly from current levels as companies favor payouts over new capital expenditure given constraints on economic growth.   |
|  | U.S. Large Cap P/E Return Impact                        | 0.00   | Valuation multiples still slightly below historical averages, but unlikely to rise materially given uncertainties over deleveraging and future price inflation.  |
|  | U.S. Mid Cap  | 8.25   | Premium to large cap assumed for both. Small- and mid-cap companies likely to be acquisition targets for larger companies, especially given significant cash build-up on large cap corporate balance sheets.   |
|  | U.S. Small Cap  | 8.25   |  |
|  | U.S. Large Cap Value                                    | 8.00   | Value to outperform growth over time, especially given likelihood of increased investor demand for yield.  |
|  | U.S. Large Cap Growth                                   | 7.50   |  |
|  | Europe ex-U.K. Large Cap (local)                        | 7.75   | Earnings premium to nominal GDP given relatively large share of emerging market sourced revenues and proactive approach to fiscal consolidation. Valuations to remain under pressure given likelihood that resolution of sovereign debt crisis will be protracted. No major change in dividend policy expected.  |
|  | Japan Large Cap (local)                                 | 4.50   | Demographic challenges and ongoing battle with deflation to mean that Japan equities continue to lag significantly behind the rest of the world.   |
|  | U.K. Large Cap (local)                                  | 8.00   | Earnings premium to nominal GDP given benefit from foreign-sourced revenues and proactive approach to fiscal consolidation. Valuations and dividend yields to remain close to current levels.  |
|  | MSCI EAFE (local)                                       | 7.25   | Market capitalization weighted average of expectations for regional equity returns.  |
|  | MSCI EAFE   | 7.25   | Exchange rate movements against weighted average of EAFE currencies expected to yield no net benefit to U.S. investors.  |
|  | Emerging Market Equity                                  | 9.00   | Relatively healthy emerging economy fundamentals, high rates of productivity and favorable demographics make for strong economic growth. Lower expected rates of return in developed markets to encourage more capital flows into the emerging world.  |
| Asia ex-Japan Equity   | 9.00  | Headwinds from higher imported commodity prices offset by stronger underlying economic growth than other emerging regions.   |  |
| Global Equity  | 7.75  | Market capitalization weighted average of expectations for regional equity returns.  |  |
| ALTERNATIVE/OTHER <sup>2</sup>                                     | U.S. Private Equity <sup>5,6</sup>                      | 8.25   | Median returns assumed to be in line with mid- and small-cap equity. Sizeable divergence expected across private investments.  |
|  | U.S. Direct Real Estate (unlevered) <sup>5,6</sup>      | 7.00   | Returns typically between stocks and bonds, but larger premium to fixed income reflects current undervaluation and reversion to fair pricing over the forecast period.   |
|  | U.S. Value Added Real Estate (unlevered) <sup>5,6</sup> | 8.25   | Premium to direct real estate assumed as in prior years for specialized acquisition and management expertise.  |
|  | European Real Estate (unlevered, local) <sup>5,6</sup>  | 6.75   | Some valuation boost from prior year, but shallower downturn and earlier recovery make for lower valuation premium than U.S.   |
|  | U.S. REITS  | 6.50   | Slight discount to underlying core real estate return given recent rapid price adjustment back towards equilibrium in more liquid REIT market.   |
|  | Global Infrastructure <sup>5,6</sup>                    | 8.00   | Exposure to government-regulated sectors limits return downside. Returns boosted by leverage and likely increase in privatizations.  |
|  | Hedge Fund—Diversified <sup>5,6</sup>                   | 6.25   | Diversified hedge fund betas are primarily a blend of global equity and fixed income, with a modest contribution from non-beta factors. Effective volatility management expected to produce attractive risk-adjusted returns for the median manager. Sizeable divergences expected between managers.   |
|  | Hedge Fund—Event Driven <sup>5,6</sup>                  | 7.00   | The key beta drivers of Event Driven managers are primarily equity risk and secondarily fixed income credit risk, with a moderate contribution from manager idiosyncratic risk taking. Return discount to global equities with sizeable divergences expected between managers.   |
|  | Hedge Fund—Long Bias <sup>5,6</sup>                     | 7.50   | The large majority of Long Bias managers' returns are attributable to global equity exposures. Median manager expected to return slight discount to global equities. Sizeable divergences expected between managers.   |
|  | Hedge Fund—Relative Value <sup>5,6</sup>                | 5.00   | Relative Value key return drivers are primarily investment grade credit, with some contribution from equity and manager idiosyncratic risk taking, world government bonds, and currencies. Consistent with historical data, Relative Value managers expected to return a modest premium to Aggregate Bonds. Sizeable divergences expected between managers.                          |
| Hedge Fund—Macro <sup>5,6</sup>                                    | 7.50  | Macro managers exhibit multi-market exposures, particularly in global equity, commodities, and currency. Manager idiosyncratic risk taking is a larger component of return than in other strategies. Sizeable divergences expected between managers. |  |
| Commodities <sup>5</sup>   | 7.00  | Returns based on expectation for global nominal GDP growth, with the majority of demand growth coming from the emerging economies.   |  |

<sup>1</sup> 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.

<sup>2</sup> All asset class assumptions are in total return terms, including equity return assumptions. All returns are in U.S. dollar terms unless otherwise indicated.

<sup>3</sup> U.S. Intermediate Treasury returns based on Barclays 7-10 yr Treasury index.

<sup>4</sup> U.S. Long Treasury returns based on Barclays 20+yr Treasury index.

<sup>5</sup> Private Equity, Hedge Funds, Real Estate, Infrastructure and Commodities are unlike other asset classes shown above in that there is no underlying investible index. Hedge fund returns are shown net of manager fees.

<sup>6</sup> The return estimates shown for these asset classes are our estimates of industry medians—the dispersion of returns among managers in these asset classes is typically far wider than for traditional asset classes. See additional notes on the following page.



“ We expect the global economic recovery to continue but to be dampened by persistent debt burdens. Moderate growth should carry equity markets and interest rates higher over time. ”

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