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Long-term capital market return assumptions

2013 estimates and the thinking behind the numbers

EXECUTIVE SUMMARY

IN BRIEF

A prolonged period of deleveraging and the decreasing efficacy of monetary policy suggest an environment of subdued growth and continued low interest rates. Inflation will likely remain tame in the near term, but revive over the longer term. The search for safe haven investments and sources of yield will likely continue, leading to a further re-rating of yield and spread product.

Our long-term assumptions at the broad asset class level include:

- Fixed income returns are expected to be hurt as yields eventually rise toward higher equilibrium levels.
- Real equity returns should be respectable, though lower than prior year assumptions. Emerging markets should remain the top performers.
- Return opportunities in alternatives remain robust, but with wide disparity across managers.

J.P.Morgan Asset Management

Settling down for the long haul

Serious macroeconomic problems dominate the background to the present situation; on both sides of the Atlantic there are unusually high levels of unemployment and critical problems with national budgets. Policy responses have brought interest rates to historic lows, yet there is little economic growth. Continuing political gridlock could undermine the efficacy of US policymaking in coming months, following the fiscal cliff drama at the end of 2012. Meanwhile, policy inadequacy in the eurozone had threatened possible disintegration of the single currency, until the European Central Bank (ECB) intervened with a verbal commitment to support the euro at all costs.

A more settled and 'normal' period for the US and western Europe may be some way off and the best way to think about possible paths from here to there may be in terms of scenarios.

Our approach has been to set aside the possible consequences of extreme political intransigence. Thus, we did not allow for a deep recession in the US such as might have been expected if temporary tax reductions of the Bush era (and a number of other stimulus measures) had been left to expire across the board. Nor do we allow for the demise of the euro, as might be expected if the member countries of the European Union (EU) fail to agree on the measures necessary to make the eurozone a feasible currency area.

Instead, we consider a central scenario that we believe to be the most pertinent for financial markets over the next ten years. In particular, we consider the consequences of two broad phenomena: a prolonged period of public sector deleveraging in the US and in Europe; and the impact of a change in monetary and fiscal policy in the developed markets.

Deleveraging continues

The theme of public-sector deleveraging that we highlighted in last year's edition is set to continue. In the past year, public debt levels have risen further, placing additional pressure on the burden of adjustment over the next ten - 15 years. The latest edition of the International Monetary Fund's (IMF's) Fiscal Trends (October, 2012) shows that the required fiscal adjustment needed over the next ten years is even larger than previously thought. Indeed, the UK government announced in its Autumn Statement that its target of stabilising and reducing the UK public debt relative to GDP by the time of the next general election, due in May 2015, is unlikely to be met.

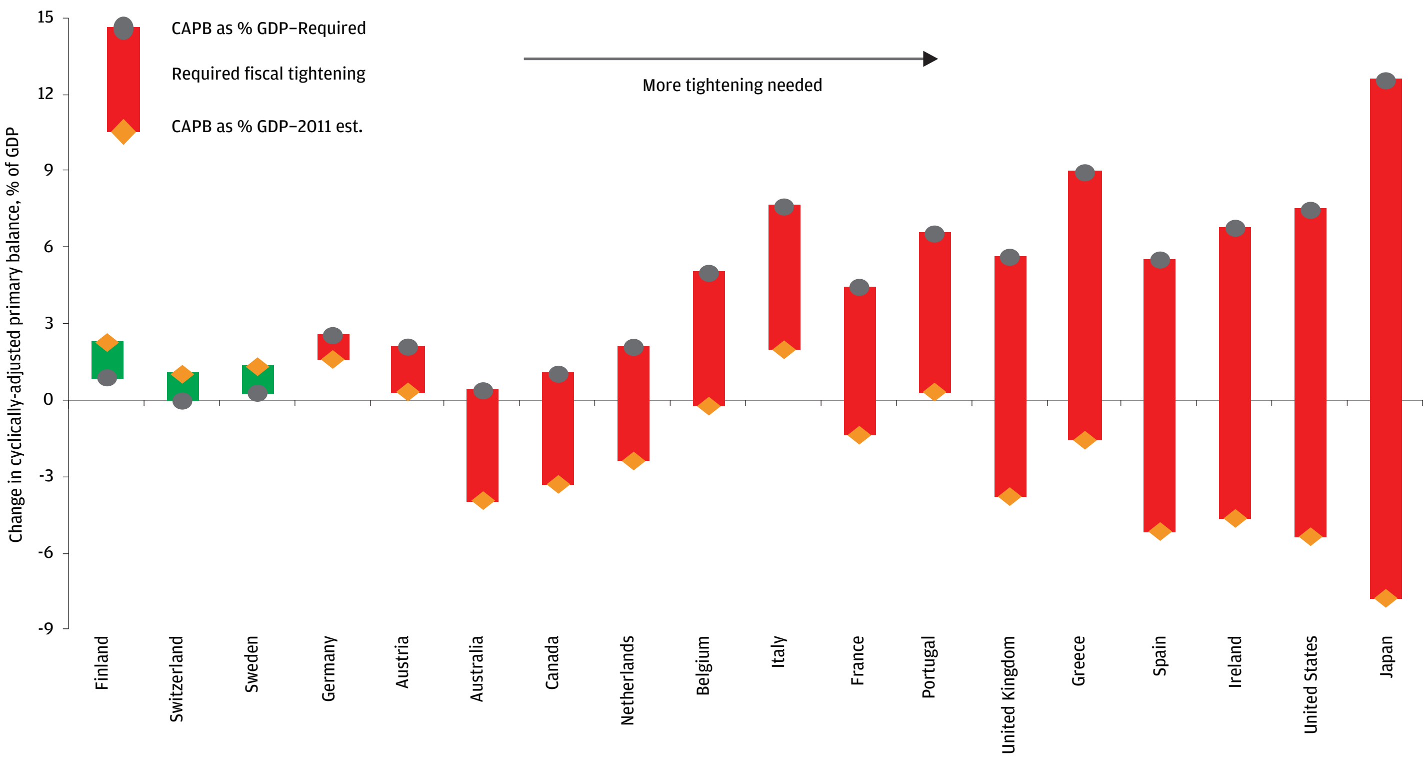
Governments are carefully working their way down the menu of outcomes for possible debt reduction (growth, repayment, inflation, restructuring and default). In early 2012, the Greek government restructured its public debt, reducing debt outstanding by EUR 107 billion – the largest government reduction in history. At the time of writing, a second restructuring was underway and there is every chance that further relief will be needed in coming years. With the economics (and politics) of deleveraging, one can (almost) always count on indebted governments to do the wrong things, after they have exhausted the other options.

Challenges for policymakers

Further deleveraging presents two challenges for policymakers. The first challenge is the potential onset of 'adjustment fatigue,' to use the IMF's description. More pertinently, this fatigue is likely to test the electoral patience of countries to continue to soldier on with further fiscal austerity. **Exhibit 1** (on the following page) shows IMF estimates of the cumulative fiscal tightening needed to achieve cyclically-adjusted primary budget balances (CAPB)[1] consistent with long-term debt reduction. The chart shows CAPB as a percentage of GDP estimates for 2011, targeted levels and the gap between the two, which represents the required fiscal tightening. To place these adjustments in perspective, the painful adjustments made by Greece over the past three years have amounted to 14.1 percentage points (ppts) of GDP, much more than the 4.3 ppts achieved by the UK. It is therefore somewhat disturbing to see the scale of required adjustment in the US (12.8 ppts) and Japan (20.3 ppts). The required fiscal adjustment needed in several countries is so severe that austerity is likely to be a fixture over the next decade, or even longer. This could try the patience of voters over at least the next two sets of elections.

[1] The primary budget balance is the overall budget balance excluding the costs of debt service.

EXHIBIT 1: FISCAL ADJUSTMENT REQUIRED OVER THE NEXT DECADE*



Source: IMF Fiscal Trends, October 2012

* **Explanatory note:** The chart shows the gap between the current underlying fiscal balance, excluding debt service costs (diamonds) and the level needed at the end of the next ten years that is consistent with stabilising/falling debt ratios (circles).

The assumption chart is for illustrative purposes only.

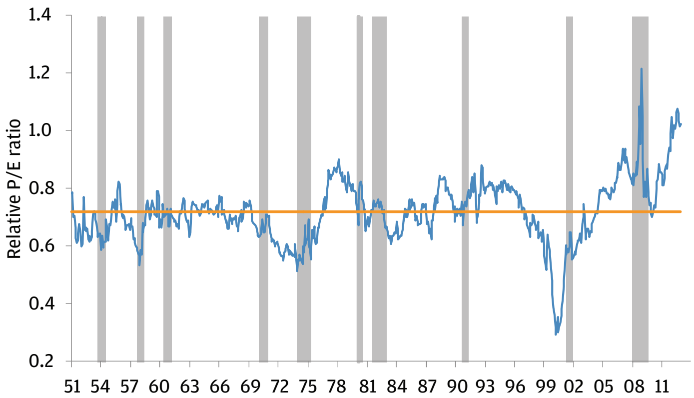
The second challenge concerns the efficacy of monetary policy, with a number of reports recently questioning whether it (and the unconventional programmes adopted in the past five years) has 'run out of bullets.' While there are no theoretical limits to the extent to which a central bank can expand its balance sheet to raise prices and thus to combat deflation, there may be practical limits to the extent to which this can be done. A recent paper by William White,[2] the former head of the Bank for International Settlements (and one of the few who accurately anticipated the crisis of 2007/2008) suggested that there are limits to what central banks can do. Moreover, he thought that there were reasons for believing that monetary stimulus might now be far less effective in boosting aggregate demand than previously. The paper also raised the concerns that ultra easy monetary policy could be a threat to the health of financial institutions and encourage unsound policies by governments.

Re-rating of yield and spread product

One of the investment consequences of ultra easy monetary policies is the search for safe haven investments and a scramble for income. This has spawned a large number of products devoted to income investing in the current environment of low government bond yields. While the search for income may make it easier for corporations and pension funds to fund liabilities and match expected cash flows, income investing also carries costs. The most significant of these costs are the implied risks that arise from a focus on targeting income rather than total return. The reach for greater yield and wider spreads can mean that investors take on more risks than before – risks that may be under-appreciated. For example, greater exposure to high yield bonds involves taking on larger default risk, which tends to also come with greater illiquidity risk. Ultimately, the search for yield often also leads to greater volatility in the longer term, even if it is compressed over shorter time frames.

[2] White, William R. (2012, August) 'Ultra Easy Monetary Policy and the Law of Unintended Consequences,' Federal Reserve Bank of Dallas, working paper No 126.

EXHIBIT 2: THE RE-RATING OF HIGHER-YIELDING US STOCKS*



Source: Empirical Research Partners, Corporate Reports, National Bureau of Economic Research.

* The chart shows the P/E of the top quintile of US stocks ranked by dividend yield, relative to the market average and using capitalisation-weighted data.
Index used is the S&P 500. Data through November 2012.

Investment in longer-dated government bonds also involves greater duration risk — a risk that could crystallise most painfully when the current period of ultra easy policies comes to an end.

The current low yield environment has led income investors to look beyond fixed income to real assets, with bond-like characteristics. Moreover, certain equities that can offer material yield advantages are being sought after, despite the differences in income characteristics between equity and fixed income assets. As **Exhibit 2** shows, the relative valuation of income-oriented versus growth stocks in the US has led some senior investors to mutter darkly about a developing yield bubble.

Asset class implications

Before turning to our return assumptions at the broad asset class level, **Exhibit 3** provides a macroeconomic backdrop for the developed world. Real GDP expectations are unchanged for the US and Japan and revised slightly upward for Europe and the UK. On the inflation front, a more inflationary stance at the ECB should bring Europe more in line with the UK and US. In Japan, despite resolve to reverse negative inflation, this could be a long time in coming. Emerging markets, however, are likely to be the source of growth and inflation.

EXHIBIT 3: EXPECTED TEN - 15-YEAR ANNUALISED GROWTH AND INFLATION RATES

Comparison of Assumptions*	2013 (%)	2012 (%)
UNITED STATES		
Headline inflation	2.50	3.25
Core inflation	2.25	2.75
Real GDP	2.25	2.25
UNITED KINGDOM		
Headline inflation	3.00	3.00
Core inflation	2.50	2.50
Real GDP	2.00	1.75
EUROPE		
Headline inflation	2.25	2.00
Core inflation	2.00	1.75
Real GDP	1.50	1.25
JAPAN		
Headline inflation	0.25	1.00
Core inflation	0.00	0.50
Real GDP	1.00	1.00

Source: J.P. Morgan Asset Management estimates.

* 2013 capital market assumptions as of 30 September 2012; 2012 assumptions as of 31 October 2011.

Fixed income

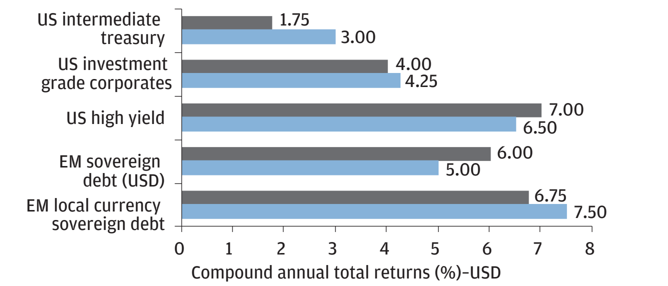
Government bond yields are likely to rise significantly from today's levels, although not for a while. The period of 'normalisation' is assumed to be extended because central banks are likely to keep policy rates lower for longer. Fixed income returns are likely to fall as yields rise toward expected higher 'equilibrium' levels in the latter part of our forecast horizon. Returns on US cash and long Treasuries are expected to be negative in real terms over the next decade, given an assumed annual core inflation rate of 2.25% in the US (see **Exhibit 4A**, on the following page).

SELECTED LONG-TERM (TEN - 15-YEAR) CAPITAL MARKET RETURN ASSUMPTIONS

EXHIBIT 4A: FIXED INCOME

EXHIBIT 4B: EQUITY

■ Prior year assumptions 2012 ■ Current assumptions 2013



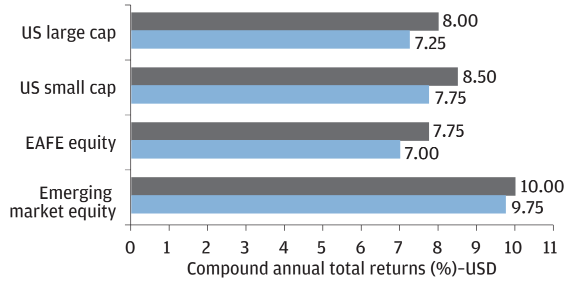


EXHIBIT 4C: REAL ASSETS*

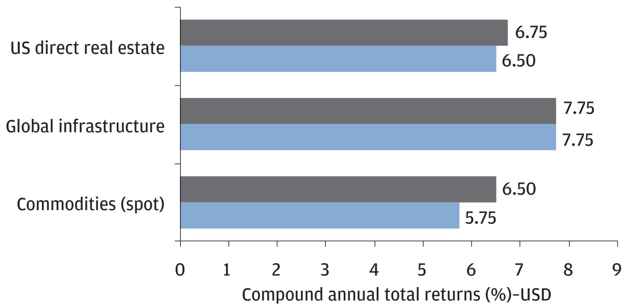
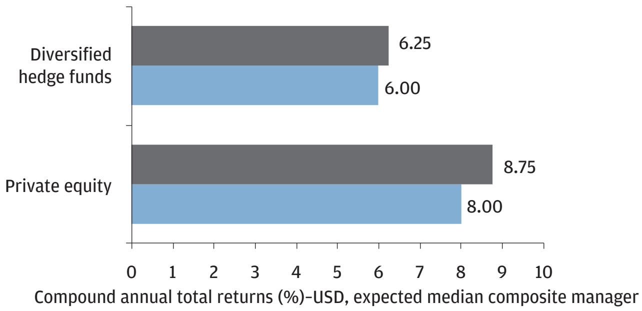


EXHIBIT 4D: ALTERNATIVES*



Source: J.P. Morgan Asset Management. Estimates as of 31 October 2011 and 30 September 2012.

Indices used: Barclays US Treasury 7-10 Year Index, Barclays US Corporate Index, Merrill Lynch High Yield Master II Index, J.P. Morgan EMBI Global Composite Index, J.P. Morgan GBI-EM Global Diversified, S&P 500 Index, Russell 2000 Index, MSCI EAFE Index, MSCI Emerging Markets Index, NCREIF Property Index, Dow Jones-UBS Commodity Spot Index, HFRI Fund of Funds Diversified Index, Thomson Venture Economics.

*These asset classes and strategies are unlike other asset classes shown above, in that there are no underlying investible indices.

Equities

Equity returns are likely to benefit from higher dividend yields, while we expect little or no benefit from valuations, following the surge in performance during 2012. While developed market growth prospects may have dimmed, we continue to look for Western companies to benefit from fast-growing markets overseas. Emerging stock markets are expected to remain the top performers (see **Exhibit 4B**).

Nominal US equity returns of 7.25% equate to average annual real returns of 5%, after subtracting our core inflation estimate. This is respectable, but below the long-term average of 6.2% per annum.

Alternatives

The outlook for real estate returns remains promising. Capitalisation rates have compressed over the past year, but property prices remain depressed and operating fundamentals are likely to strengthen. Commodity returns are still expected to outstrip inflation, but are likely to ease slightly given the projected moderation in global growth. Returns are generally assumed to be in line with global nominal GDP growth, but are adjusted over time for greater efficiency of asset use, as emerging market commodity consumers move up the efficiency curve (see **Exhibit 4C**).

With the slight reduction assumed for publicly traded risk asset returns, median hedge fund returns are also expected to be slightly below last year's assumptions, particularly for more directional strategies. Median manager private equity returns should benefit as capital market activity revives, with returns assumed to be similar to mid-cap equities. However, we expect wide differentials across managers (see **Exhibit 4D**).

EXHIBIT 5: CURRENCY ASSUMPTIONS — NEXT TEN YEARS

Currency/USD		End Sep 2012 levels	Assumptions
Euro	EUR	1.29	1.23
Canadian dollar	CAD	0.98	0.98
Japanese yen	JPY	78	75
Swedish krona	SEK	6.6	6.3
Swiss franc	CHF	0.94	1.00
British pound	GBP	0.62	0.65
Australian dollar	AUD	0.96	0.92

Source: Bloomberg, J.P. Morgan Asset Management; estimates as of 30 September 2012.

EXHIBIT 6: ASSUMPTIONS FOR SELECTED EMERGING MARKETS

Country	Real GDP growth (% p.a.)	Core inflation (% p.a.)	Equity returns, local currency (% p.a.)
Brazil	4.25	5.00	12.3
China	7.50	3.00	11.1
India	7.75	7.50	16.3
Korea	4.00	3.00	12.1
Mexico	3.75	3.25	12.7
Russia	3.75	5.50	11.9
South Africa	3.50	4.75	12.8
Taiwan	4.00	2.00	10.6

Source: J.P. Morgan Asset Management; estimates as of 30 September 2012.

Enhanced coverage in this year's assumptions

Currencies

Currency exchange rates, while not treated as a stand-alone asset class, are critical to ensure the internal consistency of our assumptions, as they create an explicit link between economies and financial markets globally. In prior years our exchange rate assumptions were derived in their entirety from local interest rate differentials. This year, we have expanded this framework by drawing on a broader set of widely accepted theoretical concepts such as absolute and relative purchasing power parity (PPP), productivity differentials and the terms of trade to develop assumptions that reflect the future fair value of a currency exchange rate. While we have arrived at these assumptions after applying careful quantitative analysis and fundamental economic judgment, we like to caution investors not to treat these as point forecasts, but as our attempt to capture the impact of underlying macroeconomic trends on the fair value of a currency exchange rate over the long term. As currency markets have demonstrated repeatedly in the past, exchange rates tend to swing in very wide ranges around their fair values for sustained periods of time, and thus, we do expect the observed exchange rates to do the same relative to our assumptions in the future (see **Exhibit 5**).

Emerging markets

This year, we have also expanded our coverage to include eight of the largest and most significant emerging markets: China, Korea, Brazil, Taiwan, South Africa, India, Russia and Mexico (see **Exhibit 6**). The combined equity market capitalisation of these eight markets amounts to USD 8.7 trillion, accounting for 76% of emerging market capitalisation and equivalent to 52% of US equity market capitalisation.

In our view, emerging markets are currently more complex than a straightforward play on global growth. From a macro perspective, the eight 'mainstream' emerging markets seem to have arrived at an inflection point after a decade of rapid development. As they place a greater emphasis on meeting domestic demand, as opposed to exporting, their large current account surpluses may dissipate.

A fundamental lesson from the history of emerging economies is that the concept of 'emerging' is not nearly as definitive and one-way as the term implies. Graduation to developed status does not guarantee a future of stability. For investors, the main message is clear: market development is dynamic and volatile rather than steady and uniform. The recent past may imply that the emerging markets merit a strategic allocation as a growth asset. The longer view of history requires investors to remain vigilant, market by market, to ensure that they are fairly compensated for a constantly shifting mix of risk and reward.

Methodology

As in previous years, we have used a building block approach to arrive at our assumptions. We believe that this provides clarity and transparency for readers and enables them to challenge and reconcile the inputs that go into them. The building blocks are as follows:

Fixed income return

Expected future yields +/- change in bond prices

Equity return

Inflation + real earnings growth + dividend yield +/- impact of valuation changes

Alternative asset returns

Historical analysis/investor judgment about relationship to public markets

Volatility and correlations

In our view, investors should allow for the effects of serial correlation (and indeed other forms of non-normality, such as fat-left tails and converging correlations) in their asset allocation decision-making process. In our long-term capital market return assumptions, we test for serial correlation and adjust these estimates accordingly, based on quantitative techniques as well as a qualitative review for reasonableness and consistency. We believe that risk estimates that account for the effects of serial correlation represent improved starting points for the asset allocation process, compared to those derived purely from historical data using traditional techniques. As a final step in the process we have adjusted the volatility levels for selected assets, to ensure that not only the return, but also the implied risk-adjusted returns or Sharpe ratio assumptions are internally consistent.

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