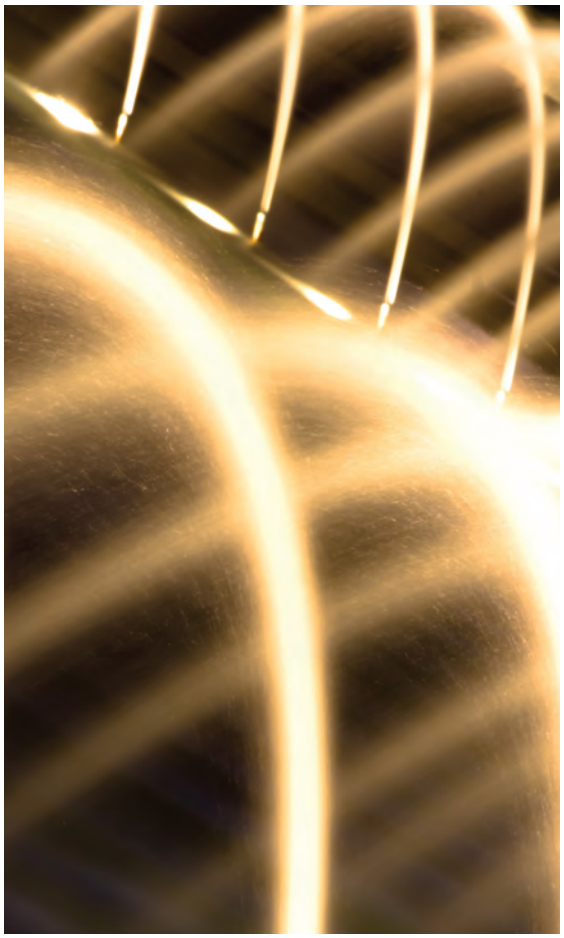


BNY MELLON
ASSET MANAGEMENT

A Perspective on Risk and Return in a Deleveraging World

By

*Newton**

NEWTON
The Power of Ideas

* The Newton Group refers to the following group of companies: Newton Investment Management Limited, Newton Capital Management Limited, Newton International Investment Management Limited, Newton Capital Management LLC, and Newton Fund Managers (CI) Limited. Except for Newton Capital Management LLC and Newton Capital Management Limited, none of the other Newton companies offers services in the U.S.

February 2012

Executive Summary

Newton argues that we are in a historic environment of deleveraging and low interest rates, which presents distinctive challenges for investors and requires a new attitude toward risk. The investment manager calls for an active and flexible approach to investing that focuses on absolute return, income generation and unconstrained strategies. In a time of state intervention in interest rate markets, Newton contends that the price of risk-free assets has been distorted to such an extent that most financial assets have been mispriced and capital has been misallocated on a global basis, increasing the absolute risk of losing money. As such they believe that investment strategies designed to preserve capital have the potential to produce strong relative returns.

Transitioning to a World with Less Debt

In many developed economies, a process of deleveraging (debt repayment) is under way which we believe will have highly significant consequences for investors. In this paper, we explore the transition to a world with less debt, examine how concepts of "risk" have evolved and explain how we think investors can meet the challenges they face.

In a complex and rapidly changing world, we believe it is critical to be able to block out the "noise" that affects financial markets and to gain perspective on areas of real investment risk and opportunity. We think themes based upon fundamental, observable trends, rather than speculative or short-lived ideas, can help evaluate risk and opportunity. They can encompass a range of topics, from healthcare to aging populations and new technology.

An important element of this thematic work over the last decade has been a consistent emphasis on the dynamics of the credit "supercycle" and the implications of that cycle for investors. Since the initial phase of the credit crisis in 2008, we believe it has become clearer that we are in a markedly different world from that which prevailed for much of the last 30 years. However, expectations that were built up over decades may take many years to change; indeed, much of the architecture of modern investment management — its emphasis on economic theories (such as market efficiency and the "rational expectations" of investors), the dominance of indexation and "quantitative optimization" models — has, we believe, been heavily influenced by the era of the "great moderation" or "great bull market" which preceded the credit crisis. During this period, asset prices rose and interest rates were low, encouraging a build-up of debt.

For a number of years, we have argued that investors are experiencing a transition to a different (but probably more "normal") investment environment, characterized by lower returns and greater volatility. Our observations do not constitute a forecast of nominal returns, which may appear elevated if "monetary debasement" (essentially the increase of money in circulation) takes hold, but we believe that they set the investment context for investors in the foreseeable future.

Investors are experiencing a transition to a different (but probably more "normal") investment environment, characterized by lower returns and greater volatility.

Such ideas underscore why we believe a focus on absolute return (rather than setting return objectives in relation to a benchmark) makes sense if the investment outlook continues to develop in the way we anticipate. Indeed, if our ideas do prove correct, it is likely that we are in the early stages of a major transition. We believe this transition will see a move away from the narrow specialization and indexation encouraged by the bull market in financial assets, which ran from the early 1980s until the early part of the last decade, towards more traditional multi-disciplinary styles of investment.

From the Great Moderation to a More Challenging Setting

The period from the early 1980s to the mid 2000s has often been referred to as the Great Moderation.[1] Exhibit 1 shows a highly stylized illustration of how we see this period. In vastly simplified terms, we note that it was characterized by relatively muted volatility in economies and capital markets (when compared with the 1960s and 1970s at least).

Exhibit 1 – The 'Great Moderation' is Over

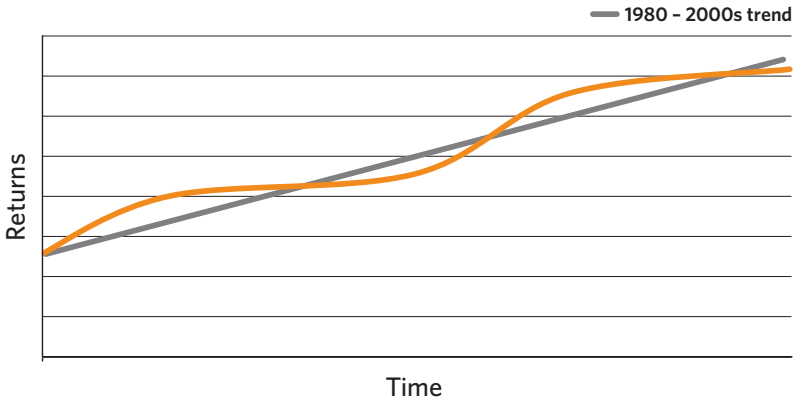


Chart for illustrative purposes only.
Source: Census, Bloomberg, Thomson Reuters Datastream, Newton.

Then and now... it's a different world

United States	1982	2011†
Fed funds rate	12%	0.25%
10-year bond yield	14%	2%
Monetary base	$149 billion	$2.6 trillion
Budget deficit as % of GDP	-2.2%	-10.1%
Household debt-to-GDP ratio	47.1%	88.3%
Inflation rate, % yoy	8.9%	3.8%
Savings rate	11.9%	4.5%
Unemployment rate	8.5%	9.1%
Profit margins (national accounts)‡	9.6%	17.5%
S&P 500 P/E ratio (1 year trailing)	8.0x	14.0x
S&P 500 cycle adjusted PE§	7.8x	20.3x
S&P 500 dividend yield	5.7%	2.3%
Demographics – average age of baby boomer	Median age is 27	Median age is 56

† September 2011.
‡ Calculated by the Bureau of Economic Analysis in the U.S. in calculating the national accounts.
§ Used 10 years of earnings to remove the effect of the economic cycle from the PE calculation.

1 http://www.gailfosler.com/commentary/chart-of-the-week/the-return-of-the-%E2%80%9Cold-normal%E2%80%9D

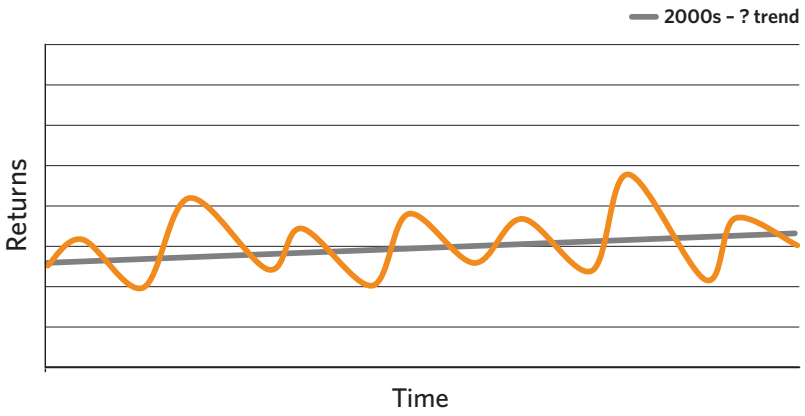
Despite poor returns for investors in risk assets in recent years, we are highly unlikely to be standing on the cusp of a new secular bull phase for financial assets.

We observe that the dominant features of the period were falling levels of consumer price inflation and consistently lower bond yields, which in turn, via the progressively lower discount rates applied to anticipated future cash flows, supported higher prices for almost all financial assets. Our research suggests that any bumps in the economic road could be, and were, accommodated with ever-looser monetary policy. With hindsight, we believe a range of trends, including globalization, inflation-targeting, deregulation and financial innovation, coincided to produce an extremely positive "perfect storm" for asset prices. We believe that the net result was the greatest bull market in financial assets that the world has ever seen.

Investment returns rely, mathematically, on one's starting point. The table in Exhibit 1 indicates we believe — using the U.S. as a proxy for the western world — that, across a range of measures (economic, monetary, market valuation, demand and demographic), 1982 was a particularly auspicious starting point for investors. This stands in stark contrast to the same measures in 2011, when, among other things, interest rates were already low, valuations and corporate margins were above average, and the demographics of the world's largest consumer economy were unfavorable.[2]

The data in the table in Exhibit 1 suggest, we believe, that despite poor returns for investors in risk assets in recent years, we are highly unlikely to be standing on the cusp of a new secular bull phase for financial assets. Indeed, it is our contention that we face something more like that represented in the stylized graph shown in Exhibit 2: a much gentler slope of returns, accompanied by more volatility (i.e., continued oscillations in both market direction *and* in headline measures of volatility).

Exhibit 2 – A More Volatile World



- Debt drag on growth, variable pace and nature of deleveraging
- State intervention: we believe policy settings create distortions and encourage speculative capital flows
- We observe that structural market developments and 'innovations' exacerbate volatility

DE-LEVERAGE

Chart for illustrative purposes only.
Source: Newton

2 Census, Bloomberg, Thomson Reuters Datastream, September 2011.

The expectation of lower financial market returns is now, we believe, relatively widespread, at least beyond the confines of the sell-side brokerage analysts, whose purpose we contend is always to promote the case for strong returns. In short, we observe that western economies and authorities are struggling to maintain bubble-era levels of activity and asset prices that support unprecedented levels of debt. We believe that low risk-free rates are a necessity, therefore, and imply low returns.

In a normal functioning economy, in which price signals are set by market forces, we suggest that the financial system exists as an intermediary between those with sources of (often limited) capital and those with projects for deploying it. In our view the current environment looks profoundly different.

The Process of Deleveraging

We believe we are in the midst of an extended period of deleveraging (debt repayment) and that this process will not progress smoothly. We observe that, unlike equity, debt is an obligation that does not disappear easily when put under stress. Given the scale of the western world's debt-related challenges and the weakness of its economic growth, deleveraging seems more likely to us to occur through a mixture of restructuring, default and monetary debasement than by way of a more orderly process of accelerated debt repayment and fiscal rectitude.

We believe western authorities are effectively caught in a trap, being unable either to save or to grow their way out of their debt. As a result, we suggest that policies are likely to remain focused on treating the symptoms of over-indebtedness, rather than the root causes (which would be likely to involve significant adjustments to living standards).

That suggests, in our opinion, that interest rates will remain low, and that monetary authorities will continue to carry out liquidity injections and money printing. We believe a major unintended consequence of such policies (and we believe there are many) is to magnify the distortions already apparent in the financial system.

In a normal functioning economy, in which price signals are set by market forces, we suggest that the financial system exists as an intermediary between those with sources of (often limited) capital and those with projects for deploying it. In our view the current environment looks profoundly different: central banks in the west are effectively providing unlimited capital at almost zero cost to the financial system,[3] but we believe the demand from the real economy, which is already too highly indebted, is limited. There have been some high profile reports of small businesses and individuals being starved of credit,[4] but we think these are more likely to have been a function of banks' diminished appetite for risk rather than of a shortage of loans; at the current time the best credit prospects appear to be those that do not need to borrow.

3 http://www.economist.com/blogs/freeexchange/2011/09/euro-crisis

4 http://www.telegraph.co.uk/finance/yourbusiness/8860877/Smallbusinesses-starved-of-credit-Bank-of-England-figures-show.html

With cash interest rates being held at close to zero, and longer-term risk-free interest rates on government bonds also artificially low, we believe that risk is being systematically mispriced.

In this distorted world, we think the financial system has progressively moved from being an agent in the economy to being a principal in transactions. In some economies, such as in the U.K., we observe that banking and finance have become vitally important profit centers in their own rights, and increasingly risky ones at that. The profits that modern large financial institutions pursue have, we contend, become increasingly speculative in nature and, some might say, socially useless. This should not really come as a surprise; we argue that the monster that is today's western banking system is another unintended consequence of the policies that contributed to the credit super cycle.

Unfortunately, in the wake of the first phase of what we saw as an inevitable financial crisis, the authorities have, as yet, we believe, missed the opportunity to radically restructure the banking industry. In our opinion, three years on from the crisis, many banks remain too highly leveraged and "too big to fail," and they continue to pose serious systemic risks (observations that are the subject of our *financial concentration* theme). These banking sector risks are, we believe, particularly marked in continental Europe, home to some of the most highly leveraged institutions on the planet.

For us, the upshot of unlimited cheap money, as well as regulatory systems that allow banks to conceal the extent of their leverage, is that the global financial system is comprised of a web of giant carry trades (strategies in which investors borrow money at a low interest rate in order to invest in an asset that is likely to provide a higher return). With cash interest rates being held at close to zero, and longer-term risk-free interest rates on government bonds also artificially low, we believe that risk is being systematically mispriced. This, in itself, is a recipe in our view for heightened volatility, but the situation is being exacerbated by a number of "innovations" (such as increasingly complex derivatives and structured products, exchange-traded funds, algorithmic computer trading systems and high-frequency trading) which we believe have magnified the scope for financial institutions to trade, arbitrage and hedge transactions. It is probably safe to say that the great bulk of the trading volumes that we witness on a day-to-day basis in financial markets derives from these kinds of activities, rather than from buying and selling by fundamentally driven investors.[5]

5 http://hft.thomsonreuters.com/2009/11/20/high-frequency-tradingon-the-near-horizon/

Changing Concepts of Risk

A key message that we are trying to emphasize is that we think the current investment environment is profoundly different from that experienced in the past by most investors working today. Much of the difference, we argue, hinges on attitudes towards risk. In the great bull market phase, in which asset prices rose consistently and were expected to continue to do so, we believe that risk came to be associated with being "out of the market," i.e., *not* owning financial assets — equities, residential real estate and the like.

If our perspective is correct, investors' idea of risk should, we believe, return to more traditional concerns about losing money, rather than missing out on gains.

This was the era in which we observe that passive investing was born. With many active investment managers struggling to exceed "trend" returns, the transition of money towards index-based mandates was, in our view, quite rationally accelerated. As the rising tide lifted all boats, the prices of a broad range of assets rose over an extended period,[6] and we observe that the number of specialist investment areas grew, and that derivative markets, based upon these specialist areas, developed quickly. We note also that, as the number of professional investors grew, so too did the attendant population of analysts, consultants, asset allocators and distributors thought necessary to act as intermediaries between the specialists and their clients.

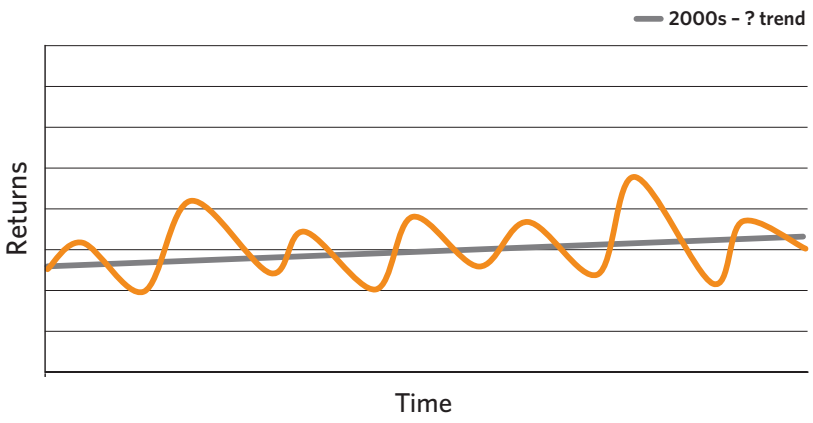
The ever-increasing complexity of the financial ecosystem led some academics and consultants to conclude that multi-specialist approaches (such as those pursued by large, high-profile U.S. endowments like Yale University), constructed in accordance with correlations observed during the great bull market era, were most appropriate in constructing investment portfolios.[7]

If our perspective is correct, and if we do indeed now live in a structurally lower return and more volatile environment, we believe investors need to think very differently about risk. At the most simplistic level, the graph in Exhibit 3 indicates that investors' idea of risk should, we believe, return to more traditional concerns about losing money, rather than missing out on gains.

6 Thomson Reuters Datastream, 12.31.11.

7 The Benefits, Misperceptions and Rationale for the Multi-Manager Approach, Tony Earnshaw, Northern Trust Global Investments, 2006.

Exhibit 3 – Characteristics for a Lower Return, Volatile Market



- Active, flexible approaches
- Emphasis on income
- Strategies that seek to reduce volatility, protect capital and aim for asymmetry of return
- 'Return based' objectives

Chart for illustrative purposes only.
Source: Newton

We believe relative risk is increasingly likely to be synonymous with absolute risk, which implies, in turn, that a strategy designed to preserve capital may also be likely to produce strong relative returns.

If, as we believe, state intervention generally (and in interest-rate markets in particular) has distorted the prices of risk-free assets to such an extent that most financial assets are mispriced, and if capital has been significantly misallocated on a global basis, the absolute risk of losing money is likely, in our view, to have increased markedly. In turn, given the significant numbers of corporate and institutional structures that are likely in our opinion to be viable solely because policy settings are maintaining interest rates, asset prices and/or demand at artificial levels, we believe that risk in stock and bond indexes has risen in absolute terms. As a result, we believe relative risk is increasingly likely to be synonymous with absolute risk, which implies, in turn, that a strategy designed to preserve capital may also be likely to produce strong relative returns.

Investment Implications

In short, we think that the above suggests that what we consider to be sensible, traditional investment styles should begin to reassert themselves over passive forms of investment. Without the benefit of a bull-market tailwind, the benchmarking of equities against their weightings in an index, without regard to the fundamental investment attributes of those equities, looks distinctly less logical to us. In an environment of structural (rather than cyclical) overindebtedness and unsustainable sovereign finances, we believe that benchmarking to government bond indexes looks like an even less valid idea.

Strategies need to be flexible enough, in our opinion, both to accommodate very significant variations in asset allocation and also, more importantly, to focus on very specific characteristics (such as particular regions, sectors and industries) within asset classes.

For us, the necessity to be active and flexible also applies to asset allocation. In the environment we anticipate, a relatively passive policy portfolio (based on the optimization of past return and volatility relationships and correlations) may be inappropriate. Diversification is likely to be broadly desirable, but correlations between asset classes can vary markedly over time, such that preconceptions and backward-looking model-based approaches are likely, we think, to be challenged. Strategies need to be flexible enough, in our opinion, both to accommodate very significant variations in asset allocation and also, more importantly, to focus on very specific characteristics (such as particular regions, sectors and industries) within asset classes. Income is clearly a vitally important element of an investor's total return. Indeed, in the calculation of long-run investment returns for bond and equity markets, the compounding of reinvested income is *the* prime factor.[8]

The great bull market era, which ran from the early 1980s until the early 2000s, involved a significant valuation re-rating for stocks, with super-normal total returns (of +17.2% per annum for UK equities over the 20 years to the end of 2000, for example)[9] more heavily influenced by capital return than would be the case in a more "normal" environment. This, combined with an assumption that equity investors should be indifferent between income and capital gains led, in our opinion, to a widely held view that dividends did not matter. In our view, nothing could be further from the truth. In the lower growth and more volatile world we are now in, robust and sustainable income streams are likely to matter more than ever.

Exhibit 3 shows that, with lower returns and heightened volatility, an investment made at any particular point has a significantly increased chance of returning to its starting value, or indeed of being worth less than that value, than during the great bull market phase, in which "the trend was your friend"; indeed, this has already been the case for equity investors in the last decade.[10]

8 Credit Suisse, Global Investment Returns Yearbook, (2011) and Elroy Dimson, Paul Marsh and Mike Staunton, Triumph of the optimists: 101 Years of Global Investment Returns, (Princeton University Press, 2002); Copyright © 2011 Elroy Dimson, Paul Marsh and Mike Staunton.

9 Thomson Reuters Datastream, 01.02.12; total return of FTSE All Share Index, 12.31.80 – 12.31.00.

10 Thomson Reuters Datastream, 12.31.11.

Although, in our opinion, volatility is clearly an important element of risk, we believe it is only one of the many risks facing investors. Indeed, in our view, an over-emphasis on volatility as the major risk can be dangerous.

It follows, then, that strategies should have more emphasis on reducing volatility, particularly on the downside. Emphasizing capital protection and preservation, and *losing less* in the more frequent periods of asset price falls, may well, we believe, be more profitable than chasing returns, not least given what the latter practice implies in terms of investment quality in a world distorted by artificially low interest rates. If a strategy is able to achieve such asymmetry in the environment we describe (i.e., making money at times of rising asset prices, but losing less when prices fall), the overall trajectory of that strategy's return should be attractive.

Clearly, this is easier said than done, but a relatively simple way to motivate an investment management team to apply as much effort towards *not losing money* as towards making it is to give it a target that only goes upward — in short, an absolute, return-based objective rather than a relative or index-based benchmark.

We think it is remarkable that until recently the idea of setting an investment manager an absolute return target was largely the realm only of hedge funds.[11] This may be because, as suggested above, the institutional structures that underpin today's investment management industry (continued emphasis upon specialist investing and relative index-based benchmarks) were built in the great bull market, and have been slow to adapt. If we are correct about the outlook, we are in the early stages of a major transition in attitudes; if we are wrong, and we are in fact in the foothills of another structural bull market, the idea of tasking one's investment manager simply to "make money" may lose some appeal. We have suggested that, in a more volatile world, investment strategies should attempt to produce a return with lower volatility, particularly on the downside. Although, in our opinion, volatility is clearly an important element of risk, we believe it is only one of the many risks facing investors. Indeed, in our view, an over-emphasis on volatility as *the* major risk can be dangerous. This is particularly the case where models that were originally designed to monitor bank's trading books, such as value at risk (VAR), a technique used to estimate the probability of portfolio losses based on the statistical analysis of historical price trends and volatilities, are applied to long-term investment strategies. For example, in the late 1990s, at the height of the technology, media and telecommunications stock bubble, our research shows that VAR-based models equated extremely low equity volatility (wrongly) with low risk to investors. In contrast, at the March 2009 low point in equity markets, with volatility elevated, a VAR-based approach suggested reducing risk further.

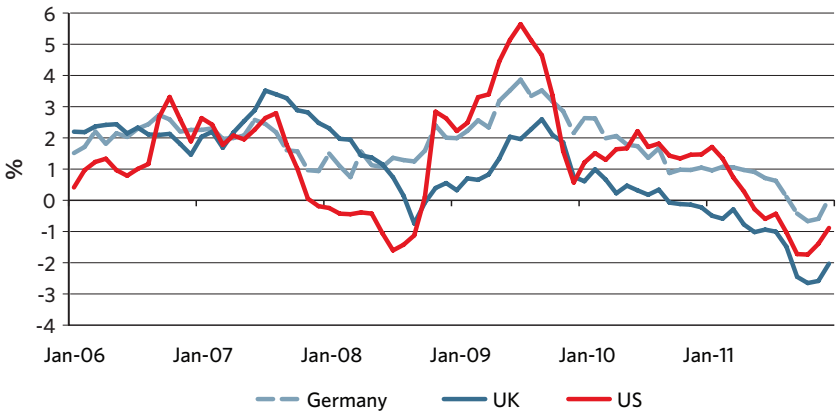
11 www.asx.com.au/products/absolute_return_funds.htm, accessed 01.11.12.

The current debt crises in the western world are so intractable that it is highly likely that "financial repression" (in the form of both long- and short-term interest rates set by the authorities at below the rate of inflation) should continue to be a preferred policy for some time to come.

In the current environment, our view is that if investors desire a reasonable *real* (after adjusting for inflation) return, they should be prepared to accept more risk in volatility terms. For us there are some obvious reasons for this, not least the fact that, as Exhibit 4 shows, in much of the developed world investors are not receiving a real return from so-called risk-free assets such as cash and government bonds and bills. We believe the current debt crises in the western world are so intractable that it is highly likely that "financial repression" (in the form of both long- and short-term interest rates set by the authorities at below the rate of inflation) will continue to be a preferred policy for some time to come.

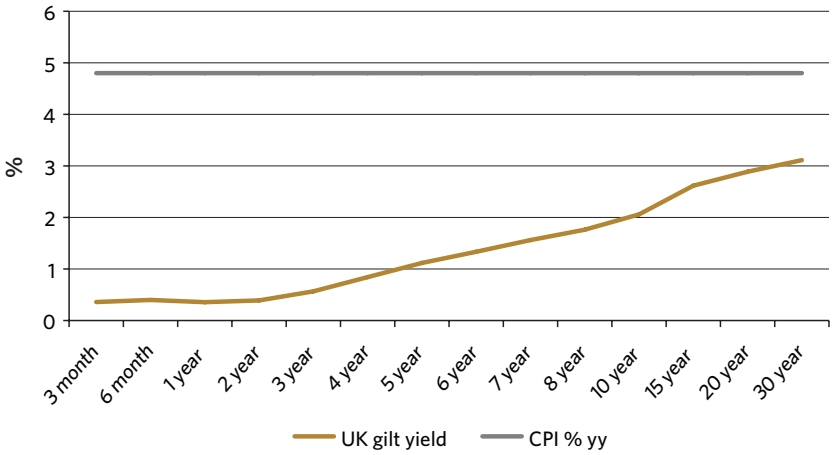
Exhibit 4 – Bond Markets

Real 10-year government bond yields (yield less headline CPI)



Source: Thomson Reuters Datastream, Newton as of December 31, 2011.

Sovereign (UK) yield curve



Source: Bloomberg, Newton as of December 31, 2011.

Investors can no longer rely on historic relationships to provide indirect hedging or diversification benefits.

We have observed that, with volatility elevated and the (often irrational) interventions of the state dominating a highly uncertain economic outlook, the costs of using derivative instruments to hedge risks are high. We believe that a passive hedging strategy, using options, would be likely to erode the more mundane returns we anticipate being generated from risk assets. Moreover, we think certain hedging strategies rely on the whim of the regulatory authorities and may not prove effective in extreme conditions. This was seen recently, for example, in the prospect that significant haircuts (reduced repayments) on Greek sovereign debt would not technically trigger a default situation, rendering insurance via sovereign credit default swap contracts ineffective.[12]

A further important consideration for investors, we believe, is that along with volatility and uncertainty may well come unstable correlations between asset types. In our view, investors can no longer rely on historic relationships to provide indirect hedging or diversification benefits.

Investment Approaches

In our opinion, accepting more risk in a volatility sense does not, however, have to mean holding a portfolio that is more risky in the traditional sense of permanent diminution of value (which we deem an investor's primary risk), and therefore we consider risk in its broadest context. Investors can seek to strike a balance between building a core portfolio of traditional assets, with the aim of producing an attractive total return in most economic circumstances, and putting in place an insulating layer of other assets, currencies and simple option strategies intended to hedge a range of scenarios, reduce volatility and protect capital. In a similar way, global dynamic bond strategies can invest across bond and currency markets in pursuit of attractive absolute returns.

For the reasons we set out above, we believe there is also significant merit in equity income-focused strategies. A focus on income has proved traditionally to be less volatile than a growth-oriented approach to equity investment and has had a protective quality during market downturns.[13] In our opinion, this accords with the fact that dividends represent a crucial component of an investor's total return from equities. Given our conviction that traditional investment styles should begin to reassert themselves over passive forms of investment in an environment of lower market returns and greater volatility, we also believe that unconstrained forms of investing should be considered. Above all, as investors experience the continuing transition from the era of the great bull market to a more challenging return and volatility environment, we believe the key attribute required of investment managers is to be active and flexible.

12 http://www.telegraph.co.uk/finance/financialcrisis/8854125/French-and-German-relief-as-Greek-haircut-not-expected-to-trigger-CDS.html

13 Thomson Reuters Datastream, Newton, January 2012; past performance is not a guide to future performance.

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