

# Compass

Neutrality deconstructed

Questioning received wisdom

What if...

Inflation risk in context

Commodities: Back to fundamentals



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Aaron S. Gurwitz Chief Investment Officer

## Neutrality deconstructed

Dear clients and colleagues:

Our current tactical stance is neutral on risk assets. Let me be clear about what this means, and what it does not mean.

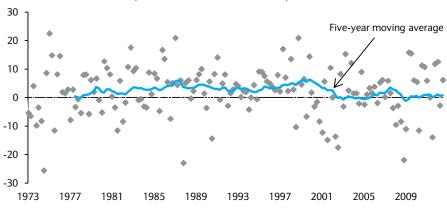
It does *not* mean that we aren't sure about whether stock prices are more likely to go up or down over the next three to six months, our tactical horizon. We expect them to go up.

It does mean that we recommend that investors should hold a normal, or "strategic," allocation to equities. No more, but no less.

Our expectation is that, over the next three- to five-years—our strategic horizon— Developed Markets Equities are likely to return about 5.5% more annually than cash and short-term bonds. In this context, our neutral weighting for Developed Markets Equities reflects our tactical expectation that over the next three to six months excess returns on this asset class will be close to that rate. Such expectations are, of course, subject to a lot of uncertainty. As Figure 1 shows, the longer-term average performance of equities is typically accompanied by considerable volatility, such that excess returns over most three-to six-month periods will be either much higher or much lower than 5%.

Figure 1: Quarterly Excess Returns on U.S. Equities

S&P 500 Total Return minus yield on three-month U.S. Treasury Bills, %



Source: Bloomberg

Past performance of investments is not a reliable indicator of their future performance

Our strategic view on equities—with which our tactical view is currently aligned—is quite constructive. The general industry consensus regarding the equity risk premium – the amount by which Developed Market Equities are expected to outperform the lowest risk investments – is closer to 4%. So our expectation is that, by this measure, the next several years will be a very good time to own stocks relative to cash and short-term bonds. As we discussed in the January 2012 issue of *Compass*, the strategic asset allocations we recommend to clients are tilted somewhat toward stocks within the context of each investor's willingness to incur the risk of short-term losses. Were it not for this fundamentally constructive long-term view on equities, our recommended Strategic Asset Allocation (SAA) for Developed and Emerging Market stocks in a portfolio would range between about 17% of total assets for the most risk-averse investors and about 60% for the most risk-tolerant. Instead our strategic

<sup>&</sup>lt;sup>1</sup> Our slight overweight in our Tactical Asset Allocation (TAA) in High Yield & Emerging Markets Bonds, where we favor corporate high yield credit, does not add significant portfolio risk. See Market Update for details on our TAA weightings and the rationale.

recommendation for total equities holdings ranges between 20% and 68%. And our neutral *tactical* posture means that each investor's current holdings should be very close to the appropriate allocation within that range, given his or her tolerance for potential short-term losses.

In this issue of *Compass* my colleagues make the case for the two salient aspects of our current view. In his "Market Outlook" essay Kevin Gardiner reminds us why our strategic posture on equities is so constructive: Stocks are fundamentally cheap relative to bonds, and global economic conditions have been strong enough to keep boosting corporate profits (albeit less significantly in the third quarter of 2012), but nowhere near robust enough to raise near-term inflation concerns. And Hans Olsen explains why—despite improving US and Chinese economic conditions and despite central banks' aggressive postures—we aren't recommending a tactical overweight in equities at this time. There are simply too many things that could very easily go wrong, including perhaps structural issues that may weigh on growth, and lead to sharp near-term losses.

What does our neutral stance mean? It is a clear call to action. It means that you should compare your current holdings with the long-term Strategic Asset Allocation that best suits your financial situation and financial personality, including your risk profile. If there are large differences between the two, as there almost always are, you should move with dispatch to redress the imbalances.

Sincerely yours,

Aaron S. Gurwitz Chief Investment Officer

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"It ain't what you don't know that gets you into trouble... It's what you know for sure that just ain't so." – Mark Twain

## Questioning received wisdom

Growth and risk appetite seem to be stabilizing. We continue to think that the US consumer—Customer No. 1 for Global Inc.—in particular is in better shape than many believe, and that the euro's crisis is not terminal. We would not be surprised to see risk assets experience some profit-taking, but would view a setback as a longer-term opportunity: strategically we still strongly prefer stocks to bonds, and corporate to government securities.

#### Much of what you know just ain't so...

A theme in the many investor presentations and seminars we've hosted of late has been the importance of questioning received wisdom. Viewing an issue from a different perspective is sometimes all it takes to realise that a seemingly-insoluble problem is nothing of the kind.

A little audience participation illustrates this. First, we ask: "Who thinks the global economy is in great shape?" Nobody raises their hands. Then we ask: "Who can identify a period in recorded history when the average human being has been significantly better off, in material terms, than today?" Again, almost all hands stay firmly in laps.

The responses seem contradictory. In reality, they aren't because the perspective in which the global economy is disappointing, with growth frustratingly-slow, is the relatively short-term, cyclical one; on a longer-term view, the economy never has done a better job of feeding and clothing the average human being. (A more profound contrast between short and long-term perception is detailed in another context in Stephen Pinker's "The Better Angels of Our Nature: The Decline of Violence in History and its Causes").

This perception gap can result in investment opportunities. By focusing too narrowly or myopically, investors can collectively overlook potentially profitable wider and longer-term themes—and in our view, that has been the case of late.

Figure 1 illustrates half-a-dozen commonly-accepted assertions that we think reflect too narrow a perspective. The three highly topical ones, by encouraging investors to believe that economies can't grow until there has been a comprehensive deleveraging, and/or that the euro is doomed to collapse, and/or that an economic cataclysm of 1930s-type proportions is already upon us, may have prevented investors from taking advantage of what we think have represented attractive, long-term opportunities to acquire selected risk assets – in particular, high yield credit and equities.

Figure 1: Received wisdom that could benefit from a wider perspective

	the state of the s
Been with us for a while	Highly topical
We don't make anything in the West any more The service sector doesn't add value	There is too much debt for economies to grow The euro cannot survive
Collectively we can't pay for our pensions	Things haven't been this bad since the '30s

Source: Barclays

The reported demise of the Anglo Saxon consumer may again have been premature

#### There can be life after debt for the Anglo Saxon world

For a third summer in succession investors worried collectively about a 'double dip' in the US, based largely on the perceived fragility of the US consumer's finances and confidence and a run of softer retail sales and spending data. For a third summer in succession, US consumers ignored these concerns and resumed their spending trend—and in the latest Michigan survey they report that they're more optimistic than at any time since 2007, thank you very much.

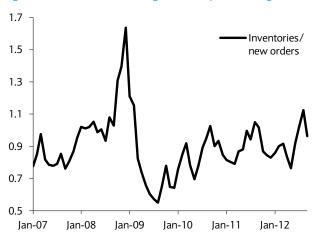
We have written often in *Compass* about how we see the aggregate US household balance sheet as being much more resilient than a focus solely on debt would suggest. It sounds far-fetched, but almost all the gloomy analyses of consumer finances ignore the fact that US consumers have assets as well as liabilities (and those assets include, of course, much of the debt issued by the federal government). When those assets are taken into account, the aggregate net worth of the US consumer has not changed materially in half a century (and the same is true, by the way, of another group of seemingly over-borrowed consumers—those in the UK). This does not mean of course that the debt doesn't matter, but it does mean, we think, that the threat posed by the debt to economic growth is being overstated by a lazy consensus.

If the US consumer—Customer No 1 for Global Inc—continues to shop, and starts tentatively buying houses again as they seem to be doing (the inventory of unsold new homes is at a half-century low), an important part of the global economy will continue to 'muddle through'. The US manufacturing inventory overhang that has been one of the few signs of recent excess in the macro data has been partially corrected (Figure 2), and manufacturers' expectations globally seem to be stabilizing (Figure 3)—in China, the UK and even in the embattled euro area, albeit at low levels there.

So far, not so bad, then. But the US 'fiscal cliff' is still lurking out there in the New Year, and will not suddenly disappear irrespective of whoever wins the White House on November 6. The potential for this to hit US—and global—growth in 2013 remains real. Indeed, as the September *Compass* article "Bungee Jumping from the Fiscal Cliff" noted, we think it quite likely that the US will fall from the cliff, and some taxes will rise and spending be sequestered in early 2013.

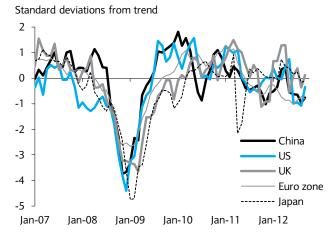
However, we also think that US politicians can still be relied upon, as Churchill remarked, "to do the right thing after they've exhausted all the other possibilities;" so we expect a belated compromise on deficit reduction to ensure that perhaps only a fraction of the

Figure 2: US manufacturing inventory overhang is fading



Source: Datastream, Barclays

Figure 3: Global manufacturing expectations stabilising



Source: Datastream, Barclays

potential total impact hits the economy in 2013—still an important potential headwind, but not the game-changing event that it could be. As September Compass suggested, for the economy and markets it could be more of a "bungee jump" than a fatal fall.

Meanwhile, a new wave of industrial innovation; some levelling in relative wage costs; favourable demographics; and an improvement in relative energy costs, all suggest that there could be a structural component to the US' tentative economic recovery as well as a cyclical one. After the slowest-growth decade in half a century, it is quite likely that trend growth is stabilising—a possibility which in our view is still not pricedin to capital markets.

#### Euro progress – a lick and a promise

Euro area politicians continue, Sisyphus-like, to inch the single currency project further up the hill, knowing all the time that there is no realistic prospect of their labours reaching an end any time soon. The progress revealed at the October Summit has been even more marginal than usual.

Yet again, however, we think that this frustratingly slow and painful progress need not prevent capital markets—or the euro area economy, as noted—from stabilizing. The European Central Bank has made its views clear: provided politicians continue to move in the right direction, albeit glacially, it will continue to act as a financial backstop. If need be, and subject to some strict conditions, it has promised to intervene to buy troubled governments' short-dated bonds in the secondary market, as part of a proposed policy of 'Outright Monetary Transactions' (marketing flair may not be the ECB's strong suit...). The scale of such proposed support is unlimited, though it would be sterilized in nature, that is, it would not lead directly to the creation of money, or

euro area 'Quantitative Easing'. The Spanish government currently is deliberating whether to apply for assistance from the European Stability Mechanism (ESM), the officially-funded bail-out facility. Doing so would trigger that ECB backstop, but at the expense of engaging Spain in a potentially-demeaning formally-monitored adjustment programme. Spanish 10-year bond yields have fallen sharply—from a brief high of more than 7.5% in July to 5.5% currently, and spreads to German bunds have narrowed similarly (Figure 4)—as the ECB's promise has been made.

2.0 1.5 1.0 3 0.5 0.0 2007 2008 2009 2010 2011 2012 •Euro interbank - OIS spread (lhs) Spain-Germany 10 year bond spread (rhs)

Figure 4: The ECB lends a hand – interbank and Spanish spreads subside

Source: Bloomberg, Barclays

The ECB's promise can underpin the euro whether OMT is used or not

As we see it, it is the *credibility* of the promise, rather than its activation, that is key. If investors decide that the ECB means what it says, they may not drive bond yields high enough to push the Spanish government into making a formal application to begin with (after all, why sell bonds if you think there is a committed buyer potentially intent on driving their prices back up?).

Arguably, what the activation decides is the source of Spain's funding, not its extent: if the Spanish government succeeds in avoiding an application, the private sector will continue to fund Spain through the markets; if it does apply to the ESM, the official sector will play a bigger funding role. Either way, a worst-case outcome—a major flight from Spanish bonds and the wider banking system—can be avoided.

Again, none of this suggests that volatility can't erupt again. Many commentators place more importance on Spain making a formal application; the Spanish government's current cat-and-mouse game with respect to doing so could backfire. As for Greece, we have been surprised ourselves at the troika's apparent willingness to offer the country more leniency, but continued Greek membership remains far from a sure thing, and while we think the wider euro area could now live with a Greek exit we'd still prefer not to find out. But overall, the 'muddle though' scenario again remains the most likely, in our view.

#### Main economic assumptions

The economic forecasts in the tables below have changed little in the last month. As usual, we'd caution that the link between economic and investment performance is an important one, but also a rather loose one. Many other things affect portfolio performance, including valuation and investor risk appetite. Meanwhile, the decimal points in the table should not be viewed as indicating greater precision than the general comments in the text: the general profiles of growth, inflation and interest rates are often more important than their absolute levels.

Again, the 'muddle through' scenario is reflected in GDP growth and inflation globally that we think are unlikely to dip below 3%. An intriguing prospect that may at some stage develop into a more active theme at the sub-asset class level—that is, in deciding which region to favour most—is a renewed small cyclical slowing of US growth in 2013, in the face of that (muted) fiscal headwind, alongside a modest acceleration of growth in Europe. Sometimes, changes in relative growth rates matter more than their absolute levels.

Figure 5: Real GDP and Consumer Prices (% y-o-y)

		Real GDP		Consumer Prices				
	2011	2012E	2013F	2011	2012E	2013F		
Global	3.8	3.1	3.5	3.9	3.0	3.2		
Developed	1.4	1.2	1.3	2.6	1.9	1.9		
Emerging	6.5	5.1	5.6	6.3	4.8	5.3		
US	1.8	2.2	2.0	3.2	2.1	2.1		
Euro area	1.5	-0.5	0.3	2.7	2.5	2.0		
Japan	-0.8	2.1	0.9	-0.3	0.0	0.2		
United Kingdom	0.9	-0.3	1.4	4.5	2.8	2.7		
China	9.3	7.6	7.6	5.4	2.9	4.0		
Brazil	2.7	1.5	4.1	6.6	5.3	5.6		
India	7.4	5.4	6.7	9.5	7.7	7.1		
Russia	4.3	3.9	3.6	8.6	5.1	6.5		

Source: Barclays Research, *Global Economics Weekly*, 19 Oct 2012. Note: Weights used for real GDP are based on IMF PPP-based GDP (5yr centered moving averages). Weights used for consumer prices are based on IMF nominal GDP (5yr centered moving averages).

Figure 6: Central Bank policy rates (end-quarter, %)

	Central Bank Rates						
	Current	4Q 12F	1Q 13F	2Q 13F	3Q 13F		
Fed funds rate	0-0.25	0-0.25	0-0.25	0-0.25	0-0.25		
ECB main refinancing rate	0.75	0.50	0.50	0.50	0.50		
BoJ overnight rate	0.10	0-0.10	0-0.10	0-0.10	0-0.10		
BOE bank rate	0.50	0.50	0.50	0.50	0.50		
China: Working capital rate	6.00	5.75	5.75	5.75	5.75		
Brazil: SELIC rate	7.25	7.25	7.25	7.25	7.25		
India: Repo rate	8.00	8.00	7.50	7.00	7.00		
Russia: Overnight repo rate	5.50	5.75	5.75	5.75	5.75		

Source: Barclays Research, *Global Economics Weekly*, 19 Oct 2012. Note: Rates as of COB 18 October 2012 in % per annum (unless stated).

#### Investment conclusions: Tactics and strategy

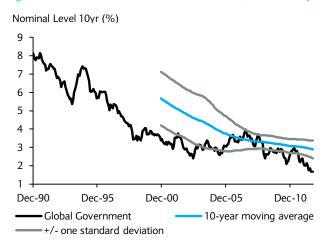
We have yet to see a material setback after the summer's rally in risk assets: developed stocks are still close to post-crisis highs. But we would not be surprised to see one, our constructive 'muddle through' outlook notwithstanding.

The rally was not without foundation. Both the US economy and the euro area crisis have seen some positive developments relative to excessively-low expectations, as noted in earlier Compasses. However, it is unusual for markets to travel in a straight line, and there are profits to be taken by the more nimble investors (mostly institutional) who bought at the stock market's current low for the year in early June. Moreover, we have noted above several possible triggers for renewed market nerves.

With this in mind, our Tactical Allocation Committee remains largely neutral on a 3-6 month view, with little divergence relative to its longer-term benchmark (Strategic Asset Allocation). We continue to favour high yield credit for its income (the room for further capital appreciation is now modest in our view), and our preferred 'safe haven' asset is cash and short-term high-quality bonds, where the nominal values of investments are secure (Figure 9).

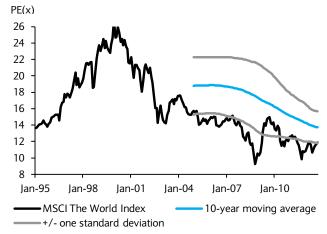
These overweights are balanced by a tactical underweight in government bonds, a notionally 'safe' asset class that can in practice see substantial mark-to-market volatility and which, despite some tentative weakening in recent weeks, continues to trade very expensively (Figure 7), with 10-year yields on both sides of the Atlantic below their respective central banks' targeted inflation levels.

Figure 7: Yields on Government bonds low, historically



Source: FactSet, Barclays

Figure 8: Equities remain inexpensive, historically



Source: FactSet, Barclays

Strategically, however, our SAA embodies a more positive stance on equities, which remain inexpensive (Figures 8 and 9)—particularly developed stocks, the cheapest asset class of the nine that comprise our SAA—even after the rally (Figure 10), and which will likely be underpinned by resilient corporate profitability in the slow but positive growth environment we envisage. As we write, the latest US results season is fostering some profit-taking after some high-profile misses, but analysts overall seem so far to have aimed a little too low with their immediate profit forecasts. We believe the markets themselves are implicitly pricing-in still lower levels again, whatever short-term volatility might seem to suggest.

With this in mind, the tactical setbacks that we see as possible in the weeks and months ahead should be seen as opportunities for long-term investors whose current weightings are below what we would recommend to move into these risk assets, not to retreat from them —provided, of course, that investors' financial personalities and circumstances so permit.

Figure 9: Current strategic (SAA) and tactical (TAA) asset allocation by risk profile

	Lo	w	Mediu	m Low	Mod	erate	Mediu	m High	Hi	gh
Asset class	SAA	TAA	SAA	TAA	SAA	TAA	SAA	TAA	SAA	TAA
Cash & Short Maturity Bonds	43.0%	44.0%	15.0%	17.0%	8.0%	9.0%	5.0%	5.0%	4.0%	4.0%
Developed Government Bonds	10.0%	8.0%	13.0%	10.0%	9.0%	6.0%	6.0%	4.0%	4.0%	2.0%
Investment Grade Bonds	3.0%	3.0%	4.0%	4.0%	4.0%	4.0%	3.0%	3.0%	2.0%	2.0%
High-Yield & Emerging Markets Bonds	4.0%	5.0%	7.0%	8.0%	8.0%	10.0%	8.0%	10.0%	6.0%	8.0%
<b>Developed Markets Equities</b>	16.0%	16.0%	29.0%	29.0%	38.0%	38.0%	45.0%	45.0%	51.0%	51.0%
<b>Emerging Markets Equities</b>	4.0%	4.0%	7.0%	7.0%	10.0%	10.0%	13.0%	13.0%	17.0%	17.0%
Commodities	2.0%	2.0%	4.0%	4.0%	5.0%	5.0%	6.0%	6.0%	6.0%	6.0%
Real Estate	7.0%	7.0%	5.0%	5.0%	4.0%	4.0%	3.0%	3.0%	2.0%	2.0%
Alternative Trading Strategies	11.0%	11.0%	16.0%	16.0%	14.0%	14.0%	11.0%	11.0%	8.0%	8.0%

Prior TAA dated 28 September 2012.

The recommendations made for your actual portfolio will differ from any asset allocation or strategies outlined in this document. The model portfolios are not available to investors since they represent investment ideas, which are general in nature and do not include fees. Your asset allocation will be customized to your preferences and risk tolerance and you will be charged fees. You should ensure that your portfolio is updated or redefined when your investment objectives or personal circumstances change. Source: Barclays

Figure 10: Total returns across key global asset classes



<sup>\*</sup> As of June 2012

Note: Past performance is not an indication of future performance. Index Total Returns are represented by the following: Cash and Short maturity bonds by Barclays Global Governments 1-3 years; Developed Government Bonds by Barclays Global Governments 7-10 years; Investment Grade Bonds by Barclays Global Aggregate - Corporates; High-Yield/Emerging Markets Bonds by Barclays Global High Yield, Barclays Global EM & Barclays EM Local Currency Governments; Developed Markets Equity by MSCI World Index; Emerging Markets Equity by MSCI EM; Commodities by DJ UBS Commodity TR Index; Real Estate by MIT TBI Index and IPD UK for January-March 2011 and NCREIF TBI Index and IPD UK Index from April 2011 onwards; Alternative Trading Strategies by Barclays ATS Equally Weighted Composite Index (25% Barclay Hedge Global Macro; 25% HFRI Relative Value TR; 25% Credit Suisse-Dow Jones Event Driven & 25% Credit Suisse-Dow Jones Managed Futures Index). The benchmark indices are used for comparison purposes only and this comparison should not be understood to mean that there will necessarily be a correlation between actual returns and these benchmarks. It is not possible to invest in these indices and the indices are not subject to any fees or expenses. It should not be assumed that investment will be made in any specific securities that comprise the indices. The volatility of the indices may be materially different than that of the hypothetical portfolio.

<sup>\*\*</sup> As of September 2012

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## What if.....

Good investors continually question what they think they know, remaining open to the possibility that things are not as they appear to be or ought to be. We consider the idea that economic growth in the US may be, for structural reasons, lower than its historical average in the decades to come. (Although we don't necessarily espouse this view, we explore it in the service of aiding understanding, hence our title.)

Such fundamental questioning does not come naturally to most people as we are built to reason with a form of intellectual shorthand. Most people are good at spotting patterns, which become the prism through which they analyze the world and put it into context. Doing so allows for the consumption of vast amounts of information quickly. The problem with approaching investing this way is that the patterns we think we know might not be so. Being open to the possibilities that come with challenging deeply held beliefs is central to avoiding the problem of thinking you know something when, in fact, you don't.<sup>2</sup>

#### Faltering innovation

A recent working paper by economist Robert J. Gordon, published by the National Bureau of Economic Research got us thinking about a few deeply held beliefs and how, if they are wrong, the implications for investing differ. Gordon's paper—"Is US Economic Growth Over? Faltering Innovation Confronts the Six Headwinds"—is an easily readable contemplation of a future that will likely look very different from the past. Gordon challenges the article of faith that economic growth is a "continuous process that will last forever." Looking at per capita real GDP of the UK and the US from 1300 through 2007 reveals little growth between 1300 and 1750 after which three "industrial revolutions" drove 250 years of economic growth.<sup>3</sup>

Provocatively, he suggests that this quarter millennium of growth might be an aberration; these industrial revolutions where so fundamental in their nature that they cannot be repeated and, therefore, nor can the growth that ensued. The first industrial revolution, (IR1), began circa 1750-1830 and was based on the inventions of the steam engine, the cotton gin, railroads and steam ships. Gordon contends that it took 150 years for this technology breakthrough to have its full effect. The next breakthrough, (IR2), came circa 1870-1900 with the inventions of the electric light and the internal combustion engine and, significantly, the advent of indoor plumbing. These breakthroughs, Gordon asserts convincingly, had the biggest impact on the standard of living in the US and the UK, and took roughly 100 years to have their full impact felt. The final industrial revolution, (IR3), began circa 1960 with computers.

IR2 was the most revolutionary in that the change it facilitated was truly fundamental to society because it allowed for large increases in human productivity and longevity, which drive economic output. Gordon groups IR2's components into five categories: (1) electricity and its spin-offs; (2) the internal combustion engine and its evolutions

<sup>&</sup>lt;sup>2</sup> The behavioural finance folks call this cognitive dissonance.

<sup>&</sup>lt;sup>3</sup> Placing much weight on data gathered during the time of the Plague is a leap of faith but in the service of making the point, we'll accept the data at a discounted face value.

through the interstate highway system; (3) running water and indoor plumbing, central heating; (4) rearranging molecules which results in petroleum, plastics, chemicals, drugs, etc; and (5) communication devices such as the telephone, phonograph, radio.

The direct and indirect benefits of these evolutions are myriad. A convincing example Gordon cites is the sanitation benefit resulting from the shift in transport to trains and cars from horses:

The average horse produced 20 to 50 pounds of manure and a gallon of urine daily, applied without restraint to stables and streets. The daily amount of manure worked out to between 5 and 10 tons per urban square mile, all requiring human labour to remove.

With better sanitation, infant mortality falls and life expectancy rises. As direct and indirect benefits spooled out from the changes, the potential output of society rose and was realized with actual increases in output per person. The wrinkle in this feel-good story is that these transformational benefits could only happen once, i.e. the increase in life expectancy from 45 to the current 79 years from improved sanitation and antibiotics is a one-time occurrence. No analogous jump will occur from medicine or greater cleanliness. Similarly, the surge in output resulting from the advent of clean indoor water, continuous heating and cooling in our homes, the increasing efficiency in transport due to speed could only happen once.

The skeptic to Gordon's line of thinking will protest: "What about the revolutionary impact of technology, the internet and all things 'e'?" The retort to this would be that the big impact of the computer-internet revolution has been felt as the number of executive assistants has shrunk and

"Many of the one-time only conversions occurred, for instance, from card catalogues...to flat screens in the world's libraries and the replacement of the punch-hole paper catalogues with flat-screen electronic ordering systems in the world's auto dealers and wholesalers."

The resulting decline in the growth of productivity from the diminishing returns of innovation is clearly seen in Figure 1.

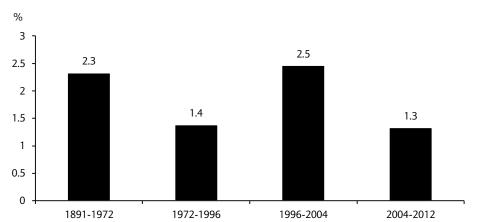


Figure 1: Average growth rates of US labour productivity over selected intervals, 1891-2012

Source: Robert J. Gordon, "Revisiting U.S. Productivity Growth over the Past Century with a View of the Future", National Bureau of Economic Research (NBER) Working Paper 15834, 3/2010 and Robert J. Gordon, "Is U.S. Economic Growth Over? Faltering Innovation Confronts the Six Headwinds", NBER Work Paper 18315, 8/2012

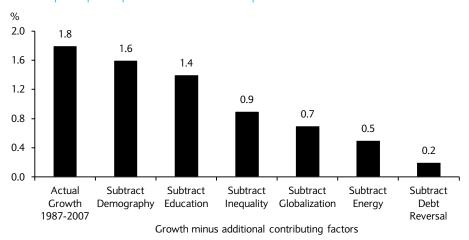
#### Structural headwinds to US growth

As the saying goes the future is a foreign country, and predicting to any degree amounts to an exercise in hope over experience. Whatever the future may hold in terms of advancements in technology that have the potential to increase society's output, Gordon delineates six headwinds with which the US economy will have to contend:

- 1. The end of the "demographic dividend"—an ageing population will reduce the growth of output per capita as people retire and hours worked decline
- 2. Problems with educational attainment driven by issues with our education system
- 3. Problems with income inequality
- 4. Globalization and the impact on income
- 5. Energy and environmental issues
- 6. Public and private indebtedness

The impact of these headwinds amounts to what Gordon calls an "exercise in subtraction," each chipping away at US growth in per capita consumption for all but the top 1% of US households. It suggests that growth in consumption per person could fall well below the economy's historic rate.

Figure 2: Components of the Exercise in Subtraction, from 1987-2007: Growth in per-capita real GDP, to hypothetical future growth in real consumption per capita for the bottom 99 percent



Source: Robert J. Gordon, "Is U.S. Economic Growth Over? Faltering Innovation Confronts the Six Headwinds", NBER Work Paper 18315, August 2012

On an optimistic note, he suggests that such a reduced future is not inevitable as it seems as the headwinds can be countered with well-considered policy responses.

Harmonizing the sobering—some would cry dystopian—assessment of the economy's future prospects with the path of the US economy's recovery from the Great Recession, it would appear that Gordon might be onto something: The American economy has seen one of the weakest recoveries in terms of growth in the modern era, with growth averaging 2.2%, compared to an average of 3.25% since 1947.<sup>4</sup> Despite this comparatively anaemic growth, capital markets have performed surprisingly well. No doubt a considerable driver of the recovery has been the alphabet soup of policy

<sup>&</sup>lt;sup>4</sup> In no quarter since June 2009 has the US economy's rebound even matched the average growth rate of prior recoveries (*Compass* Sept, 2012). Since 1947, 1%-2% GDP growth has occurred less frequently than recessions.

responses from the country's monetary and fiscal authorities, along with the "blocking and tackling" of economic actors doing the best they can by managing businesses as profitably and productively as their abilities allow.

There's a saying that one should prepare for the worst and hope for the best. Throughout the period of Gordon's analysis, investors have been committing capital successfully in extremely varied environments. Paying attention to the advantage they have when committing the capital and getting paid for the risks that they take are features of success that endure through all seasons. Our investment posture reflects this approach as the emphasis on total return investing seeks multiple sources of return from each investment. Attention to valuation and segments of markets where structural changes offer fetching risk-return potential is an ongoing focus of our efforts whether it is in distressed debt, private lending or public equities.

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## Inflation risk in context

If inflation is a general increase in prices and a corresponding fall in the purchasing power of money, it would seem that it should be avoided at all costs. In fact, a moderate amount of inflation needn't be too damaging. By all appearances, central banks around the world agree, regardless of their differing mandates with respect to price stability.

When inflation is higher than interest rates, it incentivizes consumers to buy today rather than to delay consumption in the hope of getting the same goods for the same or a lower price at a later date. Expectation of future inflation can also prompt companies to purchase new equipment or invest today versus tomorrow. Inflation can also help decrease the real value of debt for borrowers. Many economists even attribute Japan's structurally-low growth rate for most of the last two decades to a sustained downward drift in consumer prices, though the jury is still out on whether that is cause or effect.

So, how does a country achieve just the right amount of inflation, without forfeiting too much purchasing power? What is the "right amount" of inflation, anyway? It depends on whom you ask. Among central banks, opinions vary as to the right inflation target.

Figure 1: Comparing central banks' inflation targets and policy mandates

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Central Bank	Price Level measure	Target rate (y-o-y increase)
Federal Reserve (Fed)	Personal Consumption Expenditure (PCE) price index	2%
Mandate:	"promote effectively the goals of maximum employment, stable prices, and moderate long-term interest rates"	,
European Central Bank (ECB)	Harmonised Index of Consumer Prices (HICP)	0-2%
Mandate:	"focus clearly and unambiguously on maintaining price stability"	
Bank of England (BoE)	Consumer Price Index (CPI)	2% ±1%
Mandate:	"deliver price stability – low inflation – and, subject to that, to support the Government's economic objectives including those for growth and employment"	
Bank of Japan (BoJ)	Consumer Price Index (CPI)	1%
Mandate:	"achieving price stability, thereby contributing to the sound development of the national economy"	
People's Bank of China (PBoC)	Consumer Price Index (CPI)	4%
Mandate:	"maintain the stability of the value of the currency and thereby promote economic growth"	

Source: Federal Reserve, European Central Bank, Bank of England, Bank of Japan, People's Bank of China

In the next few sections, we examine the Federal Reserve's dual mandate and whether inflation is rising in the US or not; Europe's strict quest for price stability and why they are tolerating above target inflation for the moment, and emerging Asia's constant balancing act between growth and inflation. Finally, we examine the investment implications.

#### US: The Federal Reserve's dual mandate

The Federal Reserve must consider both inflation and unemployment when determining monetary policy. Typically, when unemployment is high or inflation is low, the Fed lowers interest rates to stimulate the economy. The reverse is true if unemployment is low and/or inflation is high. Sometimes, the two signals conflict. It is tough to say which mandate weighs more heavily on the Fed's agenda. Today, with unemployment high and inflation well within the Fed's comfort zone, there are no opposing forces at work.

Since interest rates are already near zero and have been for over three years, the Fed's natural policy tool of adjusting rates is not currently relevant. As a result, the central bank has been experimenting with unconventional alternatives, such as Quantitative Easing (QE). In QE, the Fed essentially 'prints' money and buys securities (in the last two QE programs, it has purchased Treasury bonds and Agency Mortgage-Backed Securities). As the Fed buys the securities in quantity, it drives up their price and consequently drives down their yields, effectively easing monetary conditions further by taking other rates, such as those used for mortgages, down as well. QE also has other, potentially less benign, effects including: (1) Suppressing true price discovery as a large non-economic buyer purchases in quantity, distorting demand; (2) edging investors out of traditionally 'risk-free' investments into higher risk, higher-yielding ones in a search for a positive real return on their capital, which typically prompts significant rallies in asset prices across the globe.

It certainly looks as if one of the objectives of QE is to spur some inflation, whether it has been explicitly said or not. The Fed has made it very clear that it will not tolerate deflation under any circumstances. In fact, whenever inflation has fallen or is trending below the 'magic' 2% in the past four years, the US central bank has acted, embarking upon QE. As well, we notice that when the QE programs conclude, inflation tends to fall. In our view, until the economy is able to achieve price stability on its own, the Fed will continue to experiment with these unconventional measures.

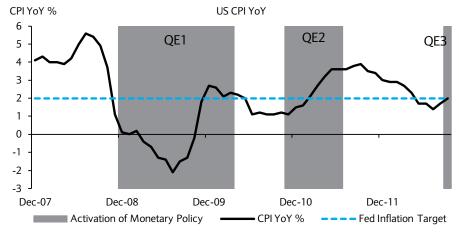


Figure 2: Inflation Below or Falling Below 2% Prompts Quantitative Easing

Source: Bloomberg

Wouldn't all of this currency printing prove to be inflationary? Not yet, by any official measure. The question is, have we seen inflation even though it has not made its way into the official numbers? In tracking consumer price increases, the Fed's preferred measure is the deflator for Personal Consumption Expenditures (PCE), provided by the Bureau of Economic Analysis. This index indicates that prices have risen just 5% from the end of the recession in June 2009 through August 2012. The Consumer Price Index (CPI), tracked by the Bureau of Labor Statistics, shows a slightly higher figure, up 7.7%

through the end of September (though there was a significant month-over-month rise from August, which could be driving some of the difference). However, a sampling of goods the average US consumer buys reveals a more dramatic picture: Gasoline is up 44% over the same time period, butter, 52%, and boneless sirloin choice meat, 10%. On the other hand, Owners Equivalent Rent, a measure of what a homeowner could get for renting his/her house, is a large component of CPI and is only up 4% since the end of the recession, holding back overall inflation.

#### UK and the euro zone: The importance of price stability

The mandates of the European Central Bank (ECB) and the Bank of England (BoE) differ substantially from those of other central banks, particularly the Federal Reserve, in their primary focus on price stability (Figure 1). However, a closer inspection of these two banks' specific language reveals noteworthy differences in emphasis. The BoE must be mindful that "low inflation is not an end in itself" but rather should be pursued with the wider economic goal of sustainable growth and employment in mind. By contrast, the ECB "assigns overriding importance to price stability" with other potential policy objectives only relevant should they be "without prejudice to the objective of price stability." (This "overriding" objective is largely a product of the long shadow cast on German memory and culture by the country's hyperinflation in the 1920s).

The focus on price stability notwithstanding, both central banks have consistently permitted their target inflation rates to be exceeded over the past four years (Figure 3). The BoE targets inflation of 2%, but permitted inflation to range between 3.0% and 5.2% from January 2010 to May 2012. The ECB has a strict target of maintaining inflation "at, below, but close to, 2% over the medium term" yet it has permitted inflation to remain above 2% since December 2010. Although each of the mandates would normally suggest a tightening of monetary policy under such conditions, central banks have not done so. This is, of course, because the global economy has been in such a precarious state that, by and large, the two central banks have erred on the side of lenience (the ECB's rate increases in 2011 notwithstanding).

Inflation (%, y-o-y) 6 5 4 3 2 1 0 -1 -2 Jan-08 Jan-09 Jan-10 Jan-11 Jan-12 UK ---- Target Euro area

Figure 3: Central banks have consistently missed their inflation target

Source: FactSet, Barclays

Indeed, with the state of the global economy and banking system believed to be fragile, and interest rates already as low as they can effectively go, the ECB and BoE have had to inject funds directly into the economy in order to provide further

<sup>&</sup>lt;sup>5</sup> June 2009 through September 2012

<sup>&</sup>lt;sup>6</sup> The ECB raised interest rates in April and July 2011 by 25 basis points each time, before cutting them again in November and December 2011, again by 25 basis points each time.

monetary stimulus. Arguably, a major economic or banking accident would be so deflationary as to allow each central bank to claim conformity with its mandate, even as actual inflation has stayed above target.

UK legislation was enacted in 2009 to establish a clear method by which the BoE could directly purchase assets, in particular UK government bonds, in order to inject money directly into the country's economy. The ECB, by contrast, is expressly prohibited from such "monetary financing of public authorities." But being under greater restriction has merely prompted the ECB to act more innovatively. The central bank has used Longer-Term Refinancing Operations (LTRO) to pump money into the economy by offering extremely cheap loans directly to banks. Furthermore, the ECB has taken steps in recent months to promise further monetary easing, provided this does not breach its mandate.

As Figure 4 illustrates clearly, the ECB has provided *considerable* monetary stimulus over the past four years, despite its restrictive mandate. Whilst not on the same scale as that of the Fed or BoE, the ECB's support has still more than doubled the size of its balance sheet.

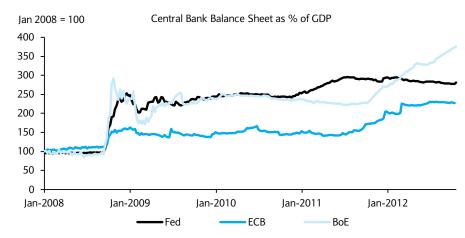


Figure 4: Monetary stimulus has inflated central bank balance sheets

Source: Bloomberg, Barclays

Importantly, the ECB has made it explicitly clear that it will provide as much monetary stimulus as possible without breaching its mandate. To the extent that sovereigns requiring assistance must first formally request conditional aid before the ECB will act, and more importantly that this action involves purchasing bonds in the secondary market (not directly financing a public authority), and that this is done to avoid a potential banking collapse which would most likely have a major deflationary impact, then the central bank's actions are indeed within its mandate.

#### Asia: Inflation versus growth

In recent months, inflationary forces have stayed largely tame by emerging Asia's standards. While commodity prices have rallied recently, they have yet to have too much of an impact on Asian inflation rates, particularly in year-on-year terms.

The sanguine outlook masks some interesting aspects of inflation in a number of Asian economies, however. Take India, for instance. Even as growth has come under pressure there recently—with GDP growth at 5.5% y-o-y in 2Q this year, compared to the 7.5% growth of 2011—India continues to experience a stubbornly high inflation rate. The latest Wholesale Price Inflation reading of September, for instance, showed that prices increased by 7.8% y-o-y, at the highest rate this year. Here, structural issues, such as a dire lack of infrastructure, are to be blamed. Bad roads and insufficient rail links result in

unnecessary rotting and wastage of food during distribution, for instance. Such constraints result in rising prices and have limited the scope for the Reserve Bank of India to cut interest rates in an effort to spur growth.

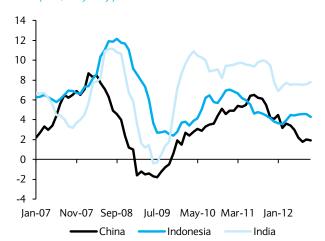
In China, policymakers have remained wary of property price levels, even as overall inflation has come down. One of the reasons why China has refrained from more aggressive monetary easing despite the recent slowdown in growth is concern that such stimulus might rekindle a property boom. Even as the market would have rejoiced if the authorities decide to suddenly carry out a massive stimulus and policy easing, there is also the new understanding that such steroid-like boost would have been harmful to the economy and hurt the sustainability of investment returns.

Reluctance to ease too much is evident in the export-dependent economy of Singapore, whose manufacturing sector has felt keenly the impact of the slowdown in global growth this year. Against some market expectations, the country's de facto central bank, the Monetary Authority of Singapore, chose to maintain a tight monetary policy at its October meeting by permitting strong currency appreciation. As much as a weaker currency would have helped Singapore's exporters, policymakers felt the need to tame inflation – which averaged 5.1% since the start of 2011 compared to 3.0% average of the preceding four years due to a structurally tighter labour market.

Although Asia's policymakers will remain more preoccupied with risks to growth than inflation in the near term, most will opt to ease monetary policy at a cautious, rather than aggressive, pace. Given that the underlying economic fundamentals remain strong across much of Asia, the decisions to adopt conservative easing will come to be appreciated by the market in the long run.

Domestic considerations aside, there is the underlying fear that, should inflation eventually become more of an issue globally, the region will be significantly affected too. In particular, food prices will be the most keenly watched by the policymakers. As a reflection of the still-low levels of income in most Asian countries, food items still make up a big chunk of the average household spending (and hence are still a significant component in most CPI baskets across the region). Any relentless increase in food prices runs the risk of upsetting social stability, posing a dilemma for the policymakers.

Figure 5: Inflation has declined in China, but less so in India (CPI, % y-o-y)



Source: Bloomberg, Barclays.

Note: India's inflation rate is calculated from the Wholesale Price Index.  $\label{eq:calculated}$ 

Figure 6: Inflation's an issue in the open Asian economies (CPI, % y-o-y)



Source: Bloomberg, Barclays

For now, the risk of runaway inflation in Asia as a whole remains low. We see a higher likelihood of policymakers being able to navigate successfully the tricky territory of easing enough to help growth, but not too much to cause high inflation.

Within Asia, we favour China and Indonesia which have been able to manage the growth-inflation tradeoff better. China has been showing signs of stabilizing growth and tame inflation, and will benefit from increasing market realization that it has managed to avoid a hard landing. Meanwhile, Indonesia's domestic demand has stayed buoyant despite global headwinds, with inflation staying well-anchored. We remain neutral on India. While recent reform momentum seems to have picked up, considerable implementation challenges remain due to heavy political opposition. Moreover, as mentioned earlier, it continues to be riddled with inflationary concerns—which limit how much the central bank can do to help support growth.

## Have we seen the full long-term effects of the unprecedented monetary accommodation?

While the major central banks in the developed economies of Japan, the US, the UK, and euro area have different mandates they have reached a broadly similar monetary policy destination. Each has taken significant steps to provide liquidity to fragile economies and a frail global banking system, despite inflation rates in some cases having exceeded their targets. However, it is clear that we are not experiencing hyperinflation anywhere across the globe. That such ample supply of monetary stimulus has not resulted in significant inflation thus far could be due to considerable spare economic capacity in each region. Understandably, investors are worried that as the regional economies return to health and deflationary pressures subside, the great volume of liquidity that has been injected into the economy in recent years may start to force prices higher. Time will tell whether the Central Banks will be agile enough to mop up the excess liquidity as quickly as it was created.

#### Investment implications

Holding too much cash or low-yielding fixed income could be hazardous to your financial health. The Federal Reserve has explicitly said it expects to keep interest rates low until mid-2015. Moreover, it has not given an end date for QE3. Nor has it communicated what level of unemployment might be acceptable. Interest rates aren't likely to rise in Europe any time soon either. With Fed, ECB and BoE policy expected to remain accommodative for the foreseeable future and official measures of inflation not recording big increases despite various price rises consumers are certainly experiencing, investors should be wary of having a large portfolio overweight with cash or 'safer' fixed income investments. These investments offer a *negative* real return by official inflation measures. Government bond yield curves for French, German, UK and US are mostly or entirely negative when local inflation expectations are taken into account. If one were to focus only on the rising costs of essential items, such as gasoline or food, the picture would be grimmer. Not to mention, with government and investment grade fixed income yields near all time lows, securities would see considerable price declines if rates were to rise or inflation, or expectations for inflation, were to pick up.

For investors concerned by the prospect of rising inflationary pressures, there is unfortunately no panacea. However there are several assets that can be used to potentially mitigate the negative effects of higher inflation that may arise.

Commodities, while not a perfect hedge, are positively correlated to inflation as our colleagues discuss in "Back to Fundamentals" on page 21 of this edition of Compass.

<sup>&</sup>lt;sup>7</sup> Source: Bloomberg, EUR German Inflation Curve, UK Index-Linked Curve, France I/L French Inflation Curve

Within equities, companies that have pricing power (the ability to pass-on inflated input costs to their customers) have a mechanism by which to outperform the wider market during periods of prolonged inflation. Such power derives from factors such as the structure of production costs, branding power, technology leadership and, in some cases, regulation. We would caution that such equities would not provide a perfect hedge—like any other equities they are still susceptible to an infinite number of unsystematic factors, and if the inflation has a vigorous-enough cost-push component, as in the 'seventies, few companies will be able easily to maintain profitability in real terms—but they may be able to offer some portfolio protection, particularly relative to other asset classes such as conventional government bonds

Corporations as well as governments offer inflation-linked fixed income securities. It is important for investors to be aware of local tax treatment. More fundamentally, it is important to remember too that while index-linked bonds hedge against the inflation that accrues during the life of the bond, the prices of the bonds themselves can temporarily diverge from the inflation index used. If the early part of the bonds' life is characterised by excessively-high inflation expectations, investors buying the bonds just after those expectations have been priced-in may see bond prices fall as it becomes clear that actual inflation may turn out lower than feared—and vice versa. Currently, we are broadly neutral on index-linked bonds on both sides of the Atlantic: the prospective inflation rates priced-in look neither outlandishly high nor low for the time being.

## Commodities: Back to fundamentals

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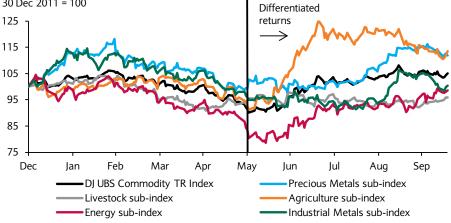
Sophie Guite +1 212 526 0719 sophie.guite@barclays.com We are neutral on commodities in a Tactical Asset Allocation (TAA) context. While broad-based gains over the next three to six months are likely to be muted, we see tactical opportunities within sub-sectors, particularly gold, oil and corn. Here we review our outlook for commodities overall and by sub-sector and offer implementation advice for investors.

#### We remain neutral in a TAA context

Commodities rallied strongly in the third quarter as improving fundamentals and the expectation of a third programme of quantitative easing by the US Federal Reserve (QE3) buoyed prices (Figure 1). The Dow-Jones UBS Commodities Total Returns Index gained 10%, driven primarily by gains in Energy (+12%) and Precious Metals (+13%).

However, since the announcement of QE3, the rush for commodities now appears to have dissipated somewhat, and in a TAA context (3-6 months), we remain neutral on commodities. Looking ahead, investors will likely respond to bottom-up supply-demand dynamics rather than merely top-down liquidity, and thus we expect differentiated returns within each sub-sector. Near-term, we think price upside is highest for gold, oil and corn, while downside risks are greatest for some industrial metals, natural gas and soft commodities like sugar, cotton and coffee.





Source: Bloomberg
Past performance of investments is not a reliable indicator of their future performance

Real commodity prices have more than doubled since 2002, making commodities expensive relative to historical levels (Figure 2). However, in the longer-term, we expect demand growth to underpin a gradual price appreciation across the commodities complex, albeit at a much slower rate than the past decade due to Chinese growth slowing to a more sustainable pace (and doubtless some expansion in supply).

Real prices (1991=100)
350
300
250
100
91 92 93 94 95 96 97 98 99 00 01 02 03 04 05 06 07 08 09 10 11 12

DJ-UBS Spot Index

Figure 2: Commodity spot prices on an inflation-adjusted basis

Source: Ecowin
Past performance of investments is not a reliable indicator of their future performance

#### Commodities remain dependent on economic growth

While central-bank liquidity has boosted commodity prices by pushing down the cost of capital, lowering the cost of holding yield-free assets, and making USD-based commodities cheaper to emerging market consumers, global economic growth has historically been an important driver for commodity prices (Figure 3), and the outlook for global growth has weakened during the year. Consensus expectations for 2012 and 2013 global GDP growth have been revised lower: 2012 growth is now forecast at 2.2%, down from 2.9% a year ago, and 2013 growth is now estimated at 2.6%, down from over 3%. The IMF also recently lowered its estimates (by 0.2% to 3.3% for 2012 and 0.3% to 3.6% for 2013). The rationale it gave included lower expectations for both emerging and developing economies, and a slowdown in world trade growth. The IMF also noted that failure to contain the crisis in Europe or to address the US fiscal cliff would prompt further downward revisions.

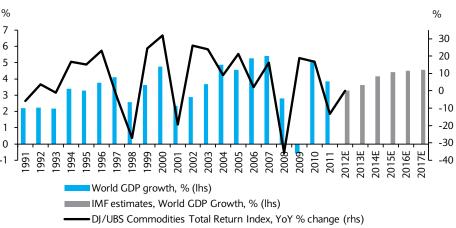


Figure 3: Global GDP growth is a key determinant of commodity prices

Source: Bloomberg Past performance of investments is not a reliable indicator of their future performance

However the consensus expects global growth to pick up in the second half of next year—to 2.9% in 3Q13 and over 3.0% in 4Q13—from just 1.7% in this past quarter (3Q12). The IMF expects global GDP growth to accelerate from 2013-15. In this context, we would expect to see gradual price gains across the commodity complex as global economic activity picks up.

#### Commodities can offer a degree of protection against inflation

Since 1985, commodity prices have been positively correlated with inflation (Figure 4). As commodities are real assets, they can offer a *degree* of protection against inflation, although they are far from a perfect hedge. The S&P GSCI Total Return Index has had a correlation with US CPI of 0.67,8 in part because of its relationship with economic growth. As a result, the commodity sub-sectors most closely tied to the economic cycle, such as energy, have performed best in the context of inflation. Contrary to received wisdom, precious metals have not historically performed as well in the context of higher inflation.

While we do not expect global inflation to rise significantly any time soon, we note that expectations for inflation have risen, particularly following the announcements of global central banks' commitments to ease monetary policy over the past few months. Once the global economy is on a more sustainable path, inflation is likely to rise and in this context, commodity prices may benefit.

Figure 4: Commodities have historically risen and fallen with inflation



Source: Bloomberg

Past performance of investments is not a reliable indicator of their future performance

#### Divergence within sub-sectors likely in the short term

While QE3 is still seen as positive for commodities, supply and demand dynamics will likely remain the dominant drivers of prices. For this reason, it is unlikely that we will see broad-based gains across all commodity sectors, as dynamics differ across the board. While there is likely short-term upside for some commodities, particularly gold, oil and corn, that upside appears to be balanced out somewhat by downside risks for some industrial metals, soft commodities and natural gas.

#### Precious metals (13% of the DJ-UBS Commodity Index)

QE3 boded well for gold prices, and the initial hint of further stimulus measures in late August was indeed the catalyst which instigated the gold rally. Quantitative easing is generally positive for gold for the following reasons: first, it puts pressure on the US dollar and heightens the debate about currency debasement; and second, it increases US inflation expectations. Although our long-term analysis shows that precious metals have *not* proved to be a good hedge against inflation, over the last couple of years, gold prices have moved with inflation expectations because of the implication for the US dollar.

 $<sup>^8</sup>$  Based on YoY % change in US CPI vs the 12-month rolling monthly returns on the S&P GSCI Total Return Index. See definitions on the back pages.

Investment demand is undoubtedly a significant driver of gold prices with ETF, bar and coin demand accounting for nearly 40% of overall gold demand. The 'QE effect' has boosted investor holdings of physically-backed gold ETFs, while investor positioning (i.e., speculative net longs in the market) has also surged. With the Fed's current QE program largely open-ended, gold prices will likely gradually trend higher as long as investment demand and speculative positioning continue to rise.

Central bank buying accounts for about 10% of global demand for gold, and we expect this buying to be an additional source of support for prices.

The other side to the precious metals market is fabrication demand, which accounts for nearly 50% of gold demand. This year, fabrication demand has been much weaker due to high local prices in India and the slowing Chinese economy. While there are signs that the physical market is now improving, soft fabrication demand could be a downside risk.

Overall, QE3 and the current risk-on environment bode well for gold. However, with gold prices seemingly dependent on inflation expectations, resurfacing concerns about global economic prospects or simply signs of very low inflation could negatively affect prices. Furthermore, if the physical market does not improve as expected, the path to higher prices could be a volatile one.

#### Industrial metals (19% of the DJ-UBS Commodity Index)

Prices of industrial metals (i.e. copper, aluminum, zinc and nickel) are closely tied to general economic sentiment. The announcements of central banks' stability measures boosted hopes for an improvement in end-use demand prospects, causing prices to rally strongly in the third quarter. However, since the announcement of QE3, industrial metal prices have retreated from their five-month highs.

The outlook for metal prices will likely be governed more directly by the outlook for global growth. Despite easier monetary policy, the immediate outlook for global economic growth remains subdued, and while growth in the Chinese economy appears to be stabilizing, we are still some way from renewed acceleration.

With the demand side weak (China accounts for about 40% of global industrial metals demand), supply growth and inventories remain more than adequate, resulting in most metal market balances being in surplus (i.e. supply outpacing demand).

In the medium-term, there are prospects for a pick-up in Chinese growth. The recent approval for infrastructure projects worth \$158bn is expected to translate eventually into a pick-up in industrial metals demand. However, there is no sign of this yet. Until signs of an improvement in Chinese demand emerge, adequate supplies and inventories will likely limit the upside for prices.

#### Energy (33% of the DJ-UBS Commodity Index)

Oil prices rallied in the third quarter, as market fundamentals tightened. Stronger-than-expected growth in demand from OECD countries alongside supply constraints from non-OPEC countries helped to push Brent crude prices to nearly \$120/bbl by mid-September. Currently, the oil market appears fairly balanced; although prices have recently retreated, we think they are more likely to rise further than to decline for two reasons.

First, despite OPEC supply being particularly strong this year—Saudi output is at 30-year highs—there has not been a significant build in oil stocks relative to the five-year seasonal average range, suggesting that the added supply is being absorbed. Furthermore, with Saudi output at such high levels, spare capacity in Saudi Arabia (the swing producer) remains extremely limited.

Second, ongoing geopolitical risks in key oil-producing regions pose a potential threat to about 7% of global supply. Tensions between Iran and the West are still running high. Security issues, logistical challenges and much-needed maintenance in oil rich eastern Libya make the country's output vulnerable. Nigeria is continuing to battle oil theft and attacks on pipelines, while the ongoing civil war in Syria continues to leave oil output offline there.

The rise in oil prices has been capped, to an extent, by talk of a potential strategic release of oil stocks if prices were to surge to uncomfortable levels, given the geopolitical instability in key oil-producing countries. However, we would see this as a temporary cap. The longer-term dynamics for higher oil prices remain in place, in our view, with growth in demand likely to continue to outpace growth in supply.

Natural gas prices also fared well in the third quarter due to improving fundamentals, but current market balances may be shifting. Coal displacement (when electrical plants shift from coal-fired to gas-fired generation) has been critical for demand growth and helped to erode the storage surplus earlier in the year. But now, with gas prices near 12-month highs, the attractiveness of switching to gas-fired electricity generation may be diminishing. We expect prices to be soft in the coming months, although a colder winter season would provide an upside to demand.

#### Agricultural commodities (30% of the DJ-UBS Commodity Index)

Agricultural commodities tend to be governed solely by supply-demand dynamics and weather. Since the drought began in the US earlier this year, market participants have been closely following weekly and monthly data releases. The highly anticipated US Department of Agriculture's quarterly Grain Stocks report at the end of September and the World Agricultural Supply and Demand Estimates report for October continued to paint a picture of tight market balances as global inventory buffers were revised lower.

The market balances for corn and soybeans look the tightest (the US stocks-to-use ratios for both are about 5%, nearly half the 10-year historical averages). Wheat prices are also likely to remain underpinned, although the global wheat market is much more balanced in comparison to corn and soybeans.

Corn and soybean prices will likely remain vulnerable to weather risks and if further rationing of demand does not occur (there has not been enough evidence of this yet), prices could stay at elevated levels for some time.

On the other hand, the outlook for the prices of soft commodities, which include sugar, cotton and coffee, appears weak. We expect a combination of slack demand and healthy production prospects to weigh on prices in the near term.

(Note: the four sub-sectors discussed here account for 95% of the DJ-UBS Commodity Index – the residual is livestock.)

#### Implementation

In practice, because it is not practical to take physical delivery of the underlying investment, most investments in commodities are implemented through the futures market, which means that in addition to the economic factors discussed above, investor returns are influenced by the shape of the futures curve and the yield on the collateral held against their positions. Rather than invest directly in commodity futures, one can invest indirectly through mutual funds and Exchange Traded Products (ETPs) that track an index.

ETPs may offer potential advantages such as typically (though not always) lower fees than a mutual fund; being listed and traded on an exchange, like stocks; and relatively

easy access to futures markets. The potential disadvantages of using ETPs include issuer credit risk and tracking error, particularly due to roll yield (i.e. rolling out of a shorter-term futures contract into a longer-term one to prevent delivery of the physical commodity). For select commodities such as gold, oil and corn, the current ETP roll yield is extremely small. Some ETPs, particularly for gold, are backed by the physical commodity itself, but most aren't.

The potential advantages of mutual funds can include professional management, diversification across commodities, and liquidity. The potential disadvantages can include relatively higher fees, and the possibility that some funds invest in the stocks of commodity producing companies, which do not provide pure-play commodity exposure and may not necessarily track the underlying commodities' performance.

Given our near-term outlook for differentiated returns among commodities, rather than broad-based gains, a professional manager may be an appropriate option for investors who want actively-managed diversification within the commodities space.<sup>9</sup>

<sup>&</sup>lt;sup>9</sup> Investing in either ETPs or mutual funds involves risk to capital. Investors might get back less than they invest.

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