



# ECONOMIC & CAPITAL MARKETS OUTLOOK

**BNY MELLON INVESTMENT  
STRATEGY & SOLUTIONS GROUP**

**FIRST QUARTER 2014**

PREPARED FOR INSTITUTIONAL INVESTORS,  
PROFESSIONAL CLIENTS, OR OTHER QUALIFIED,  
SOPHISTICATED INDIVIDUALS ONLY.



**BNY MELLON**

# EXECUTIVE SUMMARY

## ISSG CMC SUMMARY ASSET ALLOCATION

	Current	Benchmark
Global Equities	57%	50%
Global Bonds	43%	50%
Cash	0%	0%

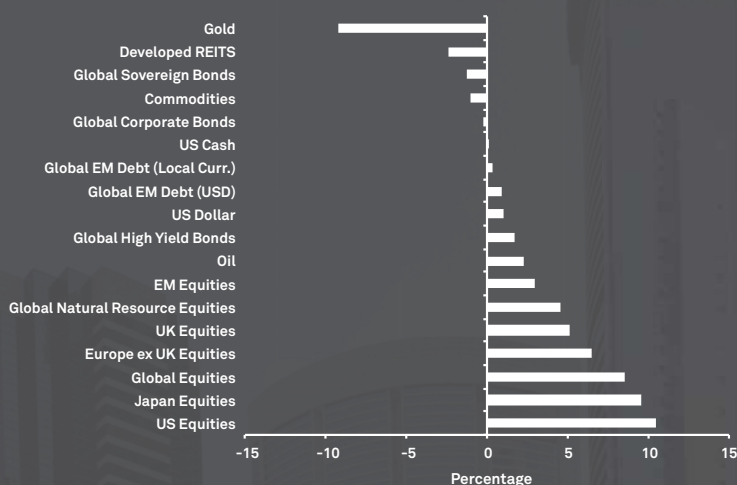
- Risk assets closer to fairly valued
- Continued movement in rates makes bonds less overvalued; still uncompensated duration risk continues to support underweight

## FIVE THINGS TO WATCH IN Q1 2014

1. EM capital flows and currencies in the face of US tapering.
2. Pace of investment spending in US & UK, to sustain economic momentum.
3. Progress towards banking union and asset quality review (AQR) rhetoric out of the Eurozone.
4. Wage increases in Japan to balance increases in headline inflation.
5. Pace of reform implementation from plenary session in China.

**FIG. 1: GLOBAL ASSET PERFORMANCE**

% change over 3 months to 31/12/13



Source: Thomson Reuters Datastream & ISSG

## ABOUT THE INVESTMENT & STRATEGY SOLUTIONS GROUP

The BNY Mellon Investment Strategy and Solutions Group (ISSG) partners with clients to develop thoughtful and actionable solutions to broad investment policy issues. We engage in an ongoing dialogue with our institutional clients to achieve a deep understanding of their concerns and needs. Harnessing the full depth and breadth of our global network of specialized investment boutiques across all asset classes and return/risk objectives, we help craft comprehensive strategies relevant for our clients' specific investment objectives and policies.

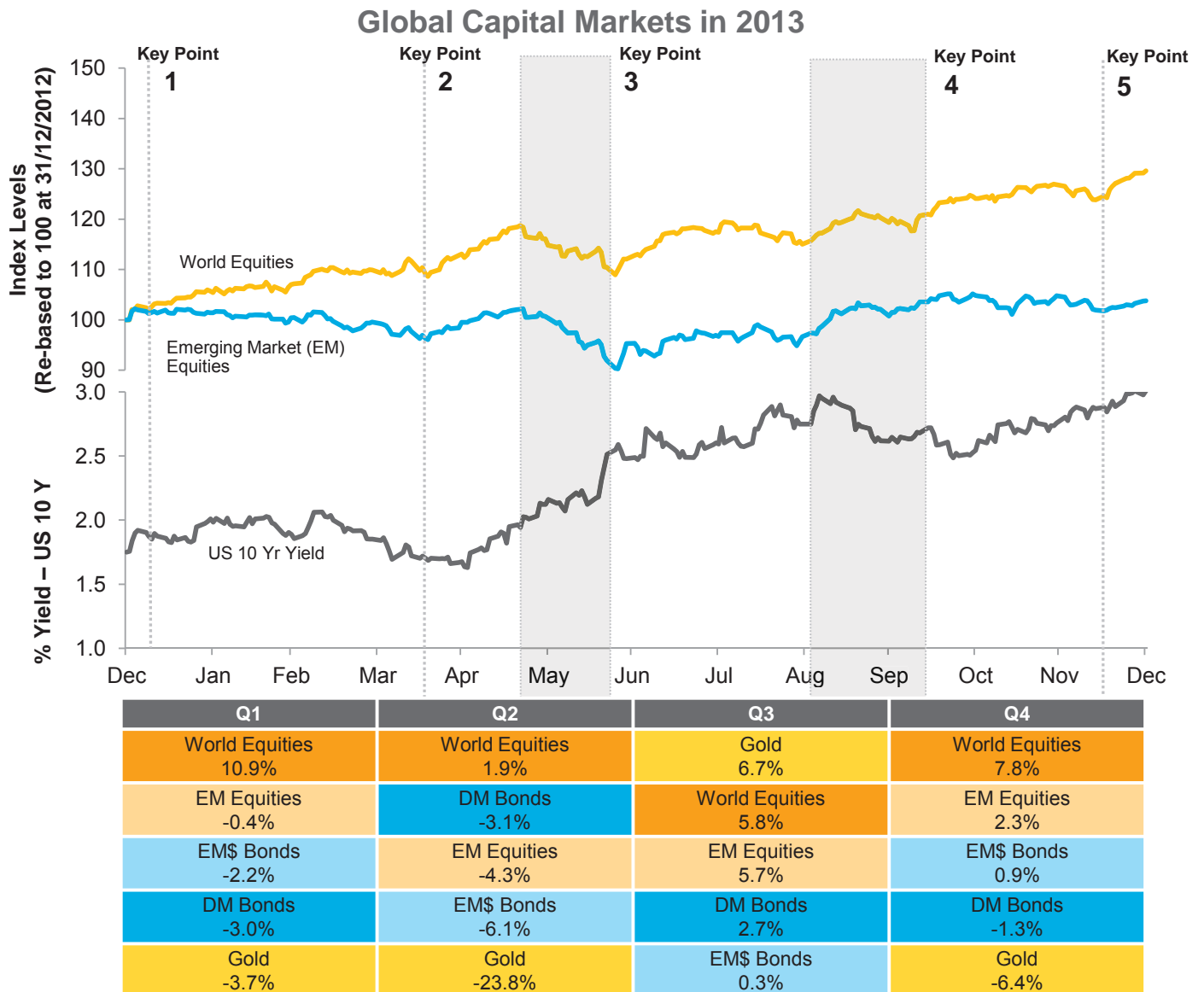
The ISSG Capital Markets Committee (CMC) governs asset allocation policy and assesses the market outlook for the global multi-asset strategies and solutions managed by ISSG.

# WHAT WE ARE WATCHING

THEME	ISSG VIEW	ASSET CLASS IMPACT	RISKS TO VIEW	RECENT CONSIDERATIONS FOR ISSG VIEW
<b>GLOBAL GROWTH</b>	Global growth continues to gain momentum while the likelihood of negative outcomes continues to diminish in probability.	Sustainable growth combined with a lower probability of negative tail scenarios being priced into markets means that risk assets should continue to outperform.	A reduction in policy stimulus may push markets to focus on fundamentals, bringing into question the sustainability of valuations at current levels.	Less room for positive surprises in developed markets move risk assets closer to fair value in the face of future uncertainties; reliance on growth, and not policy, will be crucial to maintain the upward momentum for markets seen in 2013.
<b>GLOBAL INFLATION</b>	Global inflation levels remain positive while revisions resume a downward trend; low inflation in developed markets remains.	Declining commodity prices and easing core inflation provide little in the way of headwinds to growth while allowing policy to remain accommodative; overall supportive for risky assets.	Extended easy policy in developed markets creates a lingering threat of unexpected inflation in the future.	The time at which we might expect to see inflation has been pushed further into the future, and we are unlikely to see any significant inflationary pressures before 2015.
<b>MONETARY POLICY</b>	US Fed confirmed its initial tapering for January 2014, with further tapering expected over 2014 provided that GDP growth remains robust; we view this as a move to a less stimulative policy stance and not a direct tightening action.	Despite a shift towards a less stimulative policy stance, policy remains accommodative and Fed guidance should continue to provide support to risk assets.	A reduction in stimulus is viewed by markets as an “indirect” form of tightening; risk assets decline to fundamentally supported levels as Fed credibility erodes.	Markets have reset their expectations for a reduction in stimulus; monetary policy and US Fed guidance to remain a tailwind for risk assets throughout 2014.
<b>FISCAL POLICY</b>	Sustainable growth reduces the need for fiscal austerity.	Less need for fiscal austerity positive for risk assets potentially easing pressure on sovereign credit spreads.	Structural reforms in various countries are abandoned as political will subsides in the face of economic improvement and the election cycle.	The 2014 planned VAT hike in Japan has potential to disrupt the local consumer sector in the absence of compensatory wage growth.
<b>EMERGING MARKETS</b>	Macroeconomic weakness has created an attractive valuation opportunity in emerging market equities.	EM equities positioned to do well in a renewed global growth environment with rising inflation expectations.	A reduction in US stimulus triggers capital outflows in EM; interest rates are raised to support weakening currencies, in turn providing further headwinds to growth.	Continued positive data points out of China and other EM countries point to an emerging opportunity for active allocation.
<b>“TAIL RISK MONITOR”</b>	US stimulus reduction leads to EM currency “crisis” reminiscent of 1997.	Developed markets viewed as safe haven at a time when EM valuations look unattractive.	Current account status becomes a true differentiator, with surplus EM countries offering attractive opportunities in contrast to EM deficit countries.	Reinforces a near term preference towards developed markets, particularly the US as the likely leader of a global growth acceleration in 2014.

# WHAT TO REMEMBER FROM 2013: 5 Key Points

How US monetary policy dominated the investment landscape

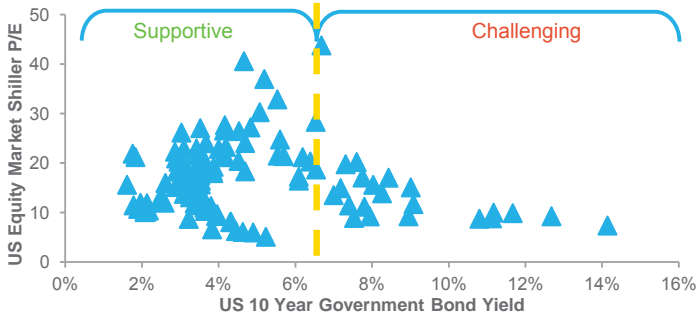


## Key Points from 2013

1. The US shook off early concerns over the massive “fiscal cliff” and effects of “sequestration” while the promise of continued liquidity in Europe and the “Abenomics” program of monetary and fiscal reforms in Japan put developed markets on an upward trend that would remain in place throughout the year. Meanwhile, housing-led inflation concerns in China coupled with mixed economic data around a possible slowdown in economic growth put downward pressure on developing economies in Asia and around the world. A surprising divergence between developed and emerging equity markets began that would remain throughout 2013.
2. Concerns over US Fed “tapering” the QE (quantitative easing program of bond purchases) gave way to hope for an extended period of easing in the US, as inflation remained a distant concern in the minds of policy makers.
3. Comments from US Fed governor Dudley and a “hawkish” Fed Chairman (Ben Bernanke) testimony to congress created angst among investors as the possibility of a September start date for the reduction in QE unexpectedly appeared on policy radars. Global interest rates began a steady climb, driving a rise in emerging market capital outflows that put further pressure on EM currencies and exacerbated the divergence between developed and developing markets. QE tapering fears intensified into late June and culminated in a Bernanke testimony on the 19<sup>th</sup> of June that laid out an end to the bond purchasing program.
4. Bernanke surprised markets again in September by delaying the expected start of QE tapering. This was driven in part by concerns ahead of the looming congressional budget battle that ultimately resulted in a US Government shutdown from the 1<sup>st</sup> through the 16<sup>th</sup> of October.
5. In one of his last actions as Fed chairman, Bernanke took the pressure off incoming chairwoman Janet Yellen and surprised investors, yet again, by announcing the start of the tapering for Fed bond purchases in the US in January 2014.

# KEY CHARTS: ECONOMICS AND MARKETS

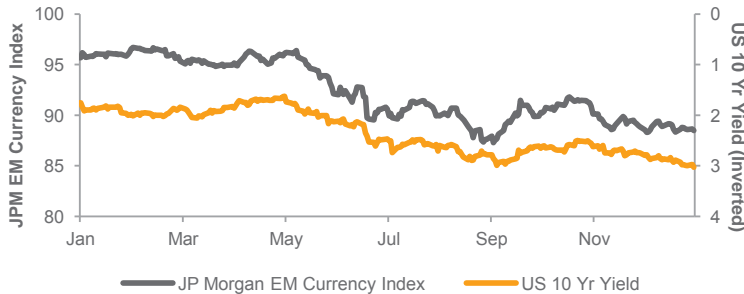
Fig. 2: US Equity Market Valuation vs. Interest Rates



We have seen concerns amongst investors that rising interest rates may cause equity markets to fall. Historically, the evidence suggests that higher bond yields are not correlated with lower equity market valuations, unless interest rates are unusually high. In Fig. 2, we recognise that the point at which high interest rates starts to harm equity valuations seems to be at a US 10-year government bond yield of 6% or greater.

Figure 2 Source: Yale University, Bloomberg, and ISSG; 1881- 2012

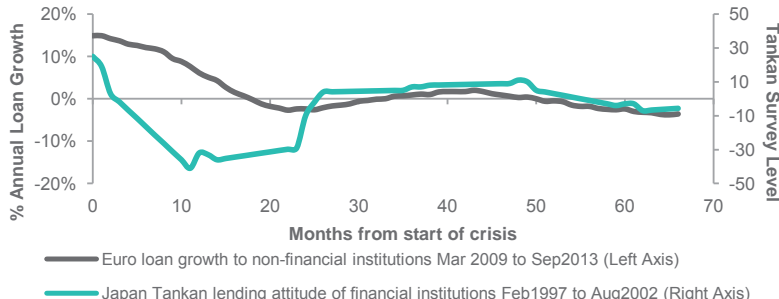
Fig. 3: Taper Effect on EM Currencies in 2013



US monetary policy remains the single largest driver of EM valuations, as seen in Fig. 3. There are some justifications for this linkage, such as some EM economies operating currency pegs that link their domestic monetary policy to that of the US, or the link between USD-denominated EM debt and the US yield curve. However, much of this can be explained in the context of an evolving opportunity set for investors who are repatriating funds previously invested in EM markets and currencies as risk-adjusted returns in developed markets improve.

Figure 3 Source: Bloomberg; Dec 31, 2012- Dec 31, 2013

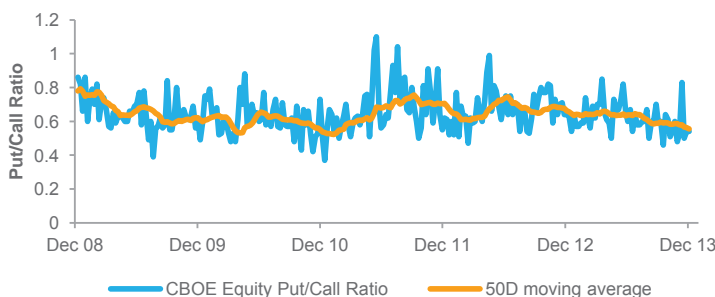
Fig. 4: Is Europe going the way of Japan?



As Japan becomes less 'deflationary' – with bold economic steps such as experiments with structural reform and aggressive monetary policy – Europe seems in danger of taking over Japan's old spot in the global economy, and suffering from many of Japan's latter-day problems. Europe at the moment has very low inflation, a compromised banking system that is uncomfortable lending to the private sector, an unwillingness to engage in structural reform, and a non-activist central bank. In Fig. 4 we see European bank lending from 2008 onwards plotted against Japanese bank lending since the start of Japan's banking crisis in 1997.

Figure 4 Source: European Central Bank (Mar2008 – Sep2013), Bank of Japan (Feb1997 – Aug2002)

Fig. 5: Confidence pick up as growth accelerates?

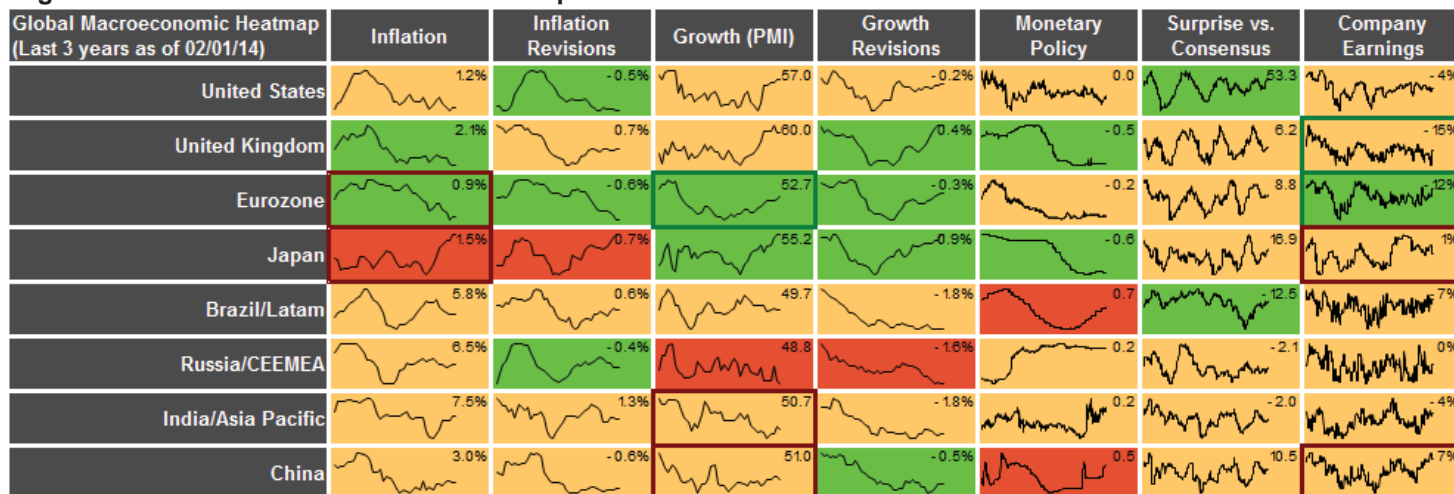


The steady decline in the CBOE put/call ratio, in our opinion, is signalling an increased level of confidence on the part of market participants of a global economic recovery that is gaining traction. As this economic recovery picks up more positive momentum, the transition from a stimulus lead equity market to one based on fundamentals will be critical.

Figure 5 Source: DataStream; Dec 2008 – Dec 2013

# ISSG GLOBAL HEATMAPS

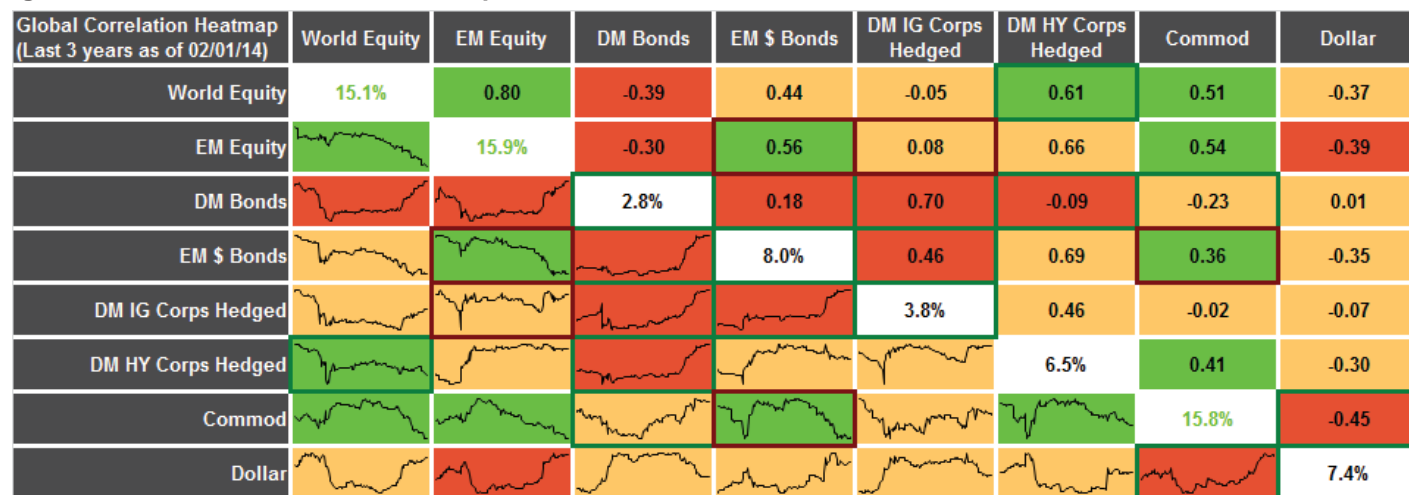
Fig. 6: ISSG Global Macroeconomic Heat Map



This heat map is designed to display a wide spectrum of macroeconomic trends across the major global regions over the past three years. Green and red shading indicate what we believe to be positive and negative levels, respectively, of the indicated variables; while green and red borders indicate positive and negative changes over the last quarter. Yellow shading indicates neutral readings. The time series lines are shown merely for ease of comparing trends, and are not meant to convey any particular values or levels. See appendix for series definitions and sources.

Although some of the changes in Q4 2013 were negative, the ISSG Global Heat Map (Fig. 6 above) continues to highlight the ongoing improvement being seen in the developed economies, particularly the US. Inflation remains benign, while inflation revisions are flat to downward trending, and yet the growth outlook continues to improve and positive economic surprises persist. Growth in much of the ex-US developed world has also picked up, continuing the divergence in economic recovery between developed and emerging economies seen in 2013. On a more positive note, we have seen a reduction in the negative indicators in emerging markets in early signs of a stabilization, and even potential improvement, in these economies. We are watching expectations for developed market strength closely so as to identify instances where expectations may get ahead of themselves, and also looking for further signs of growth and earnings improvement in China to add to evidence of economic acceleration in 2014.

Fig. 7: ISSG Global Correlation Heat Map



The Global Correlation Heatmap is designed to convey levels and changes in correlation and volatility numbers across major asset classes. Numbers in the unshaded cells represent the current exponentially weighted volatility level, with green and red fonts representing low and high levels relative to a time-weighted 3 year mean. The lower left half of the Heatmap, displaying exponentially-weighted weekly correlation pair data for the last 3 years, is included to allow users to compare trends and is not meant to convey any particular values or levels. The upper right half of the Heatmap reflects the current observation for the same data series. Green and red shading indicate what we believe to be low and high levels, respectively, of the current observation relative to a time weighted 3 year mean, while green and red borders indicate a significant decrease or increase over the last quarter.

This quarter we are introducing our Global Correlation Heat Map (Fig. 7 above). We use this tool to observe the time varying nature of asset correlations and volatilities for consideration into both risk analysis and portfolio construction. Upon initial observation of our heat map, the trend in increased correlations across fixed income assets becomes apparent and, in our opinion, is largely attributable to the duration effect of the recent rise in global yields. Also apparent is the continuing breakdown in correlations between commodities and emerging markets, which suggests both the possible end of the commodity super cycle as well as the transition to a more consumer-led economy that is taking place in China and other EM countries that have historically been more dependent on infrastructure investment and fixed capital formation for growth.

# Economic Outlook

The fourth quarter of 2013 continued in a similar vein to the rest of the year, with economic performance diverging widely between geographies. Whilst global economic growth is likely to have slowed slightly, we see much of the developed world – including the US, Japan, and the UK – on significantly higher trend growth rates than would have been foreseen as recently as a year ago. Meanwhile, European data shows little sign of improvement, with growth picking up only slightly and inflation continuing to fall. Emerging markets moved relatively more in step than they have during much of the rest of the year, showing lackluster economic data and slowing, though still high growth rates.

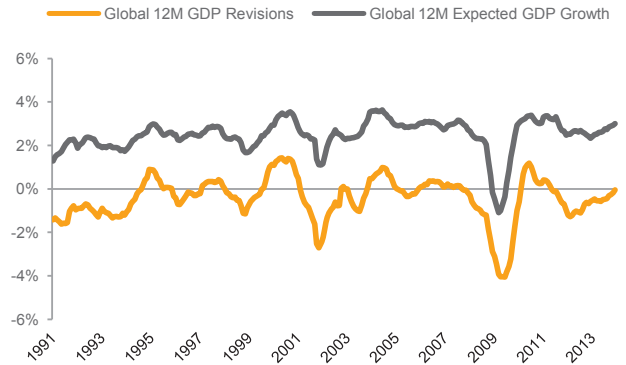
The US stood out amongst developed economies, ending the quarter with positive economic data in almost every relevant area, including jobs growth, retail sales, industrial production, consumer confidence and home prices. Part of this can be attributed to a widespread belief that the worst of the government budget wrangles have now been resolved, with the budget deadlock having previously been a major concern for both investors and actors in the real economy.

Whilst some uncertainty persisted about the timetable of Federal Reserve ‘tapering’, the initial reduction in monthly asset purchases appeared to play out according to market expectations and so had little effect on financial assets during the quarter, with the S&P actually finishing higher on the day of the announcement itself. Janet Yellen has now been installed as the new chairperson of the Federal Reserve, and the Fed is not only providing forward guidance but has also declared an intention to link monetary policy with economic data in a relatively transparent fashion, so a non-consensus view might be that, after several years of central bank-driven financial markets, the Fed will have less of a role in driving market returns over the next year.

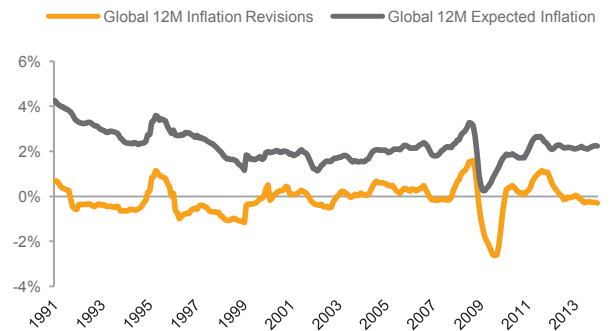
Despite the barrage of good news from the US economy, we note that company earnings have not increased significantly over the course of the year, and consequently the strong equity market performance has been based upon an expansion of earnings multiples, rather than an increase in actual earnings.

In Japan, we saw the encouraging upward move in inflation continue over the fourth quarter, alongside upward revisions of GDP growth, high business optimism and unexpectedly good economic data, with hard economic data now going some way towards justifying the increases in stock market values seen earlier in the year. This comes despite uncertainty over the extent of structural reform, and the sales tax rise in 2014 that seems to undermine the fiscal stimulus being attempted. In the near term, however, negative real yields in the Japanese fixed income sector should continue to underpin a domestic preference for riskier assets.

**Fig. 8: Expected Global Growth and Growth Revisions**



**Fig. 9: Expected Global Inflation and Inflation Revisions**



**Fig. 10: Quarterly Regional Revisions for Growth and Inflation**

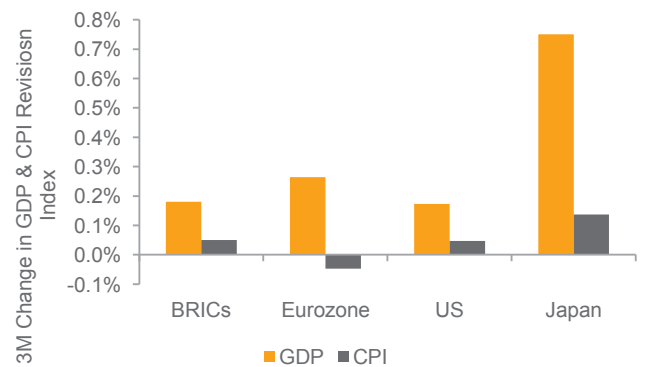
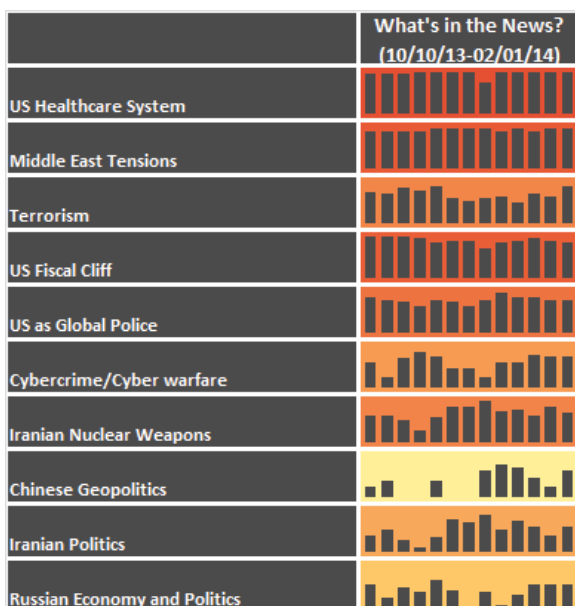


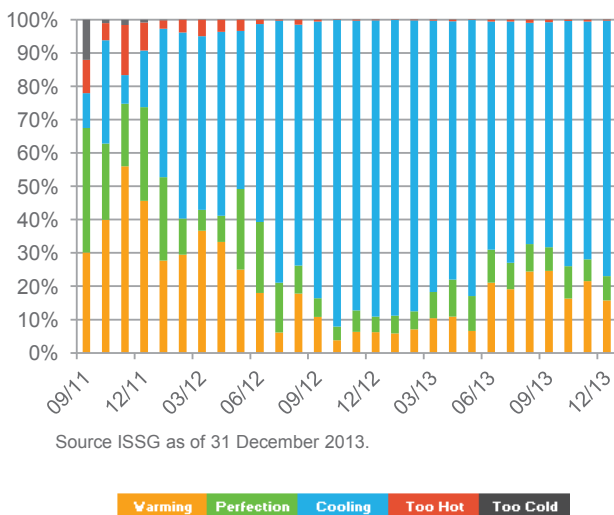
Figure 8, 9, & 10 Source: ISSG, Datastream, and Consensus Economics as of 31 December 2013.

**Fig. 11: Global Headline Hotlist**



The above graphic shows the top ten most mentioned themes that are relevant to financial markets in order of their ranking on January 2<sup>nd</sup>, 2014. The bar height shows the frequency of the coverage of each theme in the news for each of the last 13 weeks, with the furthest right bar representing the most recent ranking. The color of the background denotes the average intensity over the past quarter. Using financial media and influential blogs identified by multiple teams at BNY Mellon, those stories are used to highlight the hottest topics each week across over 3,000-6,000 news items. Story summaries are classified using a Bayesian classifier which is trained on stories from the last six months. Training stories are manually tagged and classified by a senior strategist.

**Fig. 12: RBAA\* Regime Probabilities**



Source ISSG as of 31 December 2013.

Warming Perfection Cooling Too Hot Too Cold

We also note that so far, wages in Japan have not increased in line with general price inflation; until this occurs, inflation by itself is not useful. Whilst Japan shows signs of vigor, the Eurozone (excluding Germany) seems in danger of experiencing a Japan-like period of stagnation. The Eurozone banking system is not yet sufficiently recapitalized, structural reforms are generally not occurring, and inflation is alarmingly low. In addition to this, the nature of the single currency means that relative productivity differences are being corrected by the slow and painful means of relative wage movements, rather than changes in currency values.

Whilst the financial markets and currencies of emerging economies have been volatile during the year, this has been driven, in our opinion, more by US monetary policy than by fundamentals. Most EM economies are on a long-term slowing trend, with the fourth quarter seeing downward growth revisions and disappointing economic news in most major EM economies, with the exception of China. Monetary policy in emerging markets has generally not been supportive of growth. Some EM economies (such as India) were forced to raise interest rates to support their currencies, whereas others (such as China) are attempting to constrain asset bubbles and house price rises by limiting the availability of credit.

Economic data for China in the fourth quarter has generally been better than that of other emerging economies. Yet, with inflation already low, high company earnings, and growth appearing to pick up, significant uncertainties remain about the future of the Chinese economy, with even well-informed commentators expressing wildly divergent views. The questions revolve around whether domestic consumption can replace investment as the main driver for growth, and whether dangerous asset bubbles have already appeared in the housing market and the somewhat opaque financial system. Thus far, the bull case has been better supported by events than the bear case. However, even if these concerns prove to be unfounded, investing in a fashion which harnesses China's economic growth is not easy, since most borrowing is not done via public financial markets.

Geo-political risks to the global economy exist but do not seem to be oppressive. Much of this stems from the Middle East, with continued political turbulence in Egypt, a civil war in Syria, and concerns about Iran's nuclear plans; 'Middle East Tensions' have featured consistently high on the ISSG's 'Headline Hotlist' over the past few weeks, alongside Eurozone issues, QE tapering, and the US Fiscal Cliff.

The ISSG Regime Based Asset Allocation system\*, which attempts to assign a probability to the future state of the global economy, continues to overwhelmingly predict a 'cooling' state of falling growth and falling inflation, with a much lesser (16% chance) probability of a 'warming' state currently projected. This is little changed from the last quarter. Both cooling and warming regimes tend to coincide with risk asset returns, though cooling is generally more supportive of bond prices; if the warming probability starts to increase, this may be an indicator of forthcoming inflation and hence prompt a review of fixed income allocations in investors' portfolios.

\*Regime Based Asset Allocation (RBAA) is a proprietary asset allocation model created by the ISSG which considers asset returns in the context of regimes created by underlying changes in growth and inflation expectations. Contact the ISSG for detailed information on this research. Please see appendix for information regarding regime categories.



# Asset Class Outlook

Global Equity Markets:				
	ISSG CMC View	Valuation Model	Momentum Model	RBAA Model
U.S. Equity	Overweight	Favorable	Favorable	Favorable
	Now that the initial reduction in QE has occurred and the market has gained some familiarity with Yellen as a Fed Chairperson, equity markets should begin to focus more on underlying fundamentals as opposed to monetary policy. With equities in the US close to fair value, a pick up in private investment on the part of US corporations will be a critical driver for the outlook in 2014.			
Europe ex UK Equity	Neutral	Neutral	Favorable	Favorable
	The reduction in probability of a worst case scenario continues to underpin market performance in the Eurozone region. However, uncertainty around the creation of a sustainable banking union, fiscal headwinds, and the EU's Asset Quality Review (AQR) of the banking system lead us to a Neutral stance.			
Pacific ex Japan Equity	Neutral	Favorable	Favorable	Favorable
	While valuations remain attractive, there is still large exposure to commodities that are in the process of adjusting to excess supply. This point has given our committee reason to move to a neutral position despite attractive valuations in the region.			
Japan Equity	Neutral	Neutral	Unfavorable	Unfavorable
	The Japanese market appears to be at a crossroads. "Abenomics" has given a boost to optimism amongst both investors and the general populace, but so far there are few signs of improvement in hard economic data and many of the key tenets of the policy (structural reform and the ability of the BoJ to create inflation) remain unproven, and as such we remain cautious.			
UK Equity	Neutral	Favorable	Favorable	Favorable
	An increase in demand against depleted inventories combined with a pause in fiscal retrenchment has led to strong economic momentum. Additionally, downward pressure on commodities has eased inflationary pressure. Similar to the US, increased spending from UK companies will be vital to sustainable growth going forward.			
EM Equity	Overweight	Favorable	Favorable	Favorable
	Emerging markets continue to underperform developed markets, creating attractive valuation opportunities. The increasing importance of each economy's own distinct macro-economic situation in determining performance, plus the large number of elections occurring in 2014, means that differentiating and understanding the various economies is of greater importance than ever before.			
REIT Equity	Underweight	Neutral	Favorable	Favorable
	A lack of investor confidence in risky assets over the past few years increased the desirability of investments which were perceived to be "real" assets, or which provided a high and relatively stable level of income. REITs were a beneficiary of these trends, but as bullish sentiment now develops, their earnings multiples and valuations appear stretched relative to other equities.			
Global Natural Resource Equity	Neutral	Favorable	Neutral	Neutral
	Attractive if recent commodity price weakness reverses, these equities should respond positively to accelerating growth in emerging markets as well. Despite attractive valuations, we remain on the sidelines for the time being.			

Fig. 13: ISSG CMC Global Asset Class Views

ASSET CLASS	ISSG VIEW
Global Equities	+7.0%
U.S.	O/W
Europe Ex U.K.	Neutral
Pacific Ex-Japan	Neutral
Japan	Neutral
U.K.	Neutral
EM	O/W
REITS	U/W
Global Natural Res.	Neutral
Global Bonds	-7.0%
U.S. Sovereign Debt	U/W
U.K. Sovereign Debt	U/W
Japanese Sovereign Debt	U/W
German Sovereign Debt	U/W
High Yield	Neutral
U.S. IG Corp. Bonds	U/W
EM Local Cur. Debt	O/W
EM USD Sovereign Debt	O/W
Cash	+0.0%

FIG. 14: GLOBAL EQUITY INDEX PERFORMANCE % change vs.. MSCI AC World Index over 3 months 31/12/13

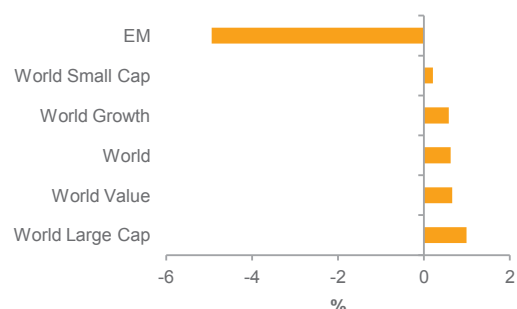


FIG. 15: COUNTRY INDEX PERFORMANCE % change over 3 month to 31/12/13

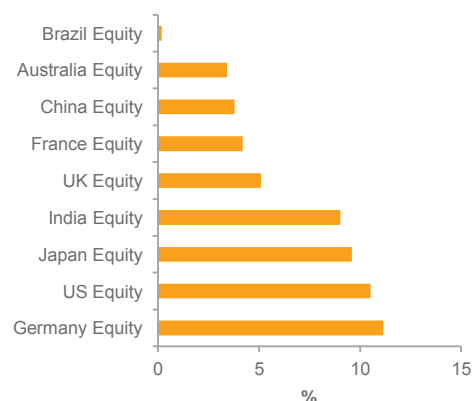
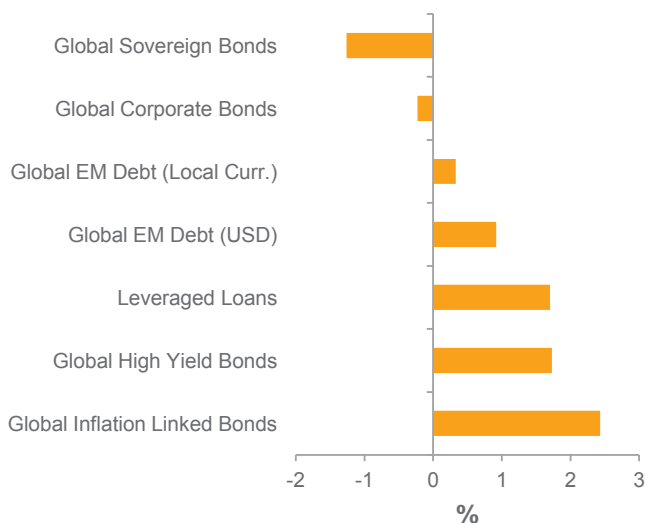


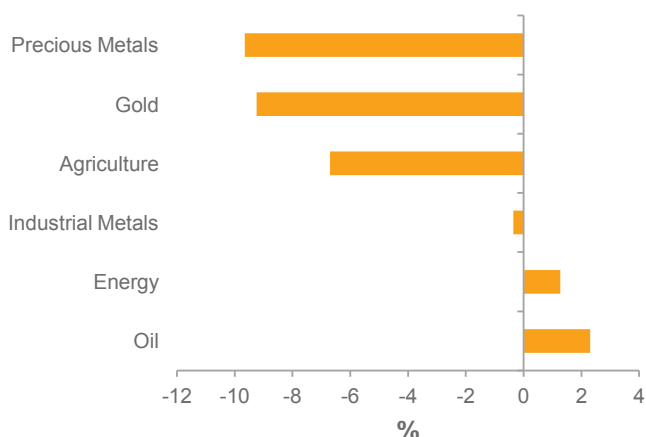
Fig 14 & 15 Source: Thomson Reuters Datastream & ISSG

**FIG. 16: FIXED INCOME PERFORMANCE**  
% change over 3 months to 31/12/13



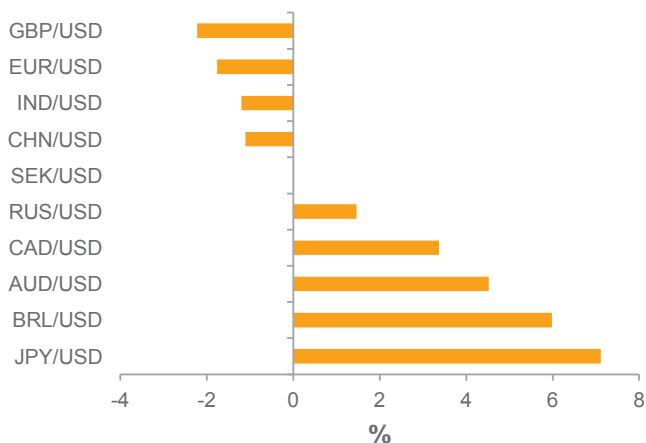
Source: Thomson Reuters Datastream & ISSG

**FIG. 17: COMMODITIES PERFORMANCE**  
% change 3 month to 31/12/13



Source: Thomson Reuters Datastream & ISSG

**FIG. 18: FX CURRENCY PAIRS**  
% change 3 months to 31/12/13



Source: Thomson Reuters Datastream & ISSG

**Global Bond Markets:**

	ISSG CMC View	Valuation Model	Momentum Model	RBAA Model
<b>Developed Sovereigns</b>	Underweight	Unfavorable	Unfavorable	Unfavorable
	Rates continue to move higher, driven both by improving economic outlooks globally and the recent start of "tapering" in the US. Developed sovereign bonds have moved further away from overvalued but we believe rate normalization will continue.			
<b>High Yield</b>	Neutral	Unfavorable	Neutral	Unfavorable
	Spreads for high yield bonds are at or below long-term averages. Historically low default rates, weighed up against increasing government bond yields, leaves us neutral on the asset class despite our preference for spread risk versus duration risk.			
<b>Investment Grade Corporate Bonds</b>	Underweight	Unfavorable	Unfavorable	Unfavorable
	The total return potential in investment grade corporate bonds remains unattractive given large flows that have gone into the asset class in recent years. Investors are not being compensated for duration risk in the asset class and are also vulnerable to widening credit spreads.			
<b>Emerging Markets - Local</b>	Overweight	Favorable	Unfavorable	Neutral
	Emerging Market Local Currency debt remains an exotic asset class to many investors, and as such relative yields are still attractive. However, most EM currencies cannot be hedged, and therefore this asset class will come with the potential for significant currency volatility that may in some cases dominate the yield pick up. Improving global growth prospects should provide a more constructive backdrop for this asset class into 2014.			
<b>Emerging Markets - USD</b>	Overweight	Unfavorable	Neutral	Neutral
	While we remain overweight to EM USD debt, we are growing more cautious. Inflationary pressures, combined with the potential need to defend currencies from capital outflows leave little policy room to support growth should it deteriorate sharply. However, 2014 may see political windfalls and reform in some key EM economies (India, Brazil, Mexico), boosting returns through lower credit spreads.			
<b>Cash</b>	Neutral	N/A	N/A	N/A
	We have eliminated our cash overweight. The recent pick up in long term yields changes the relative value of holding cash versus fixed income spread products.			

**Commodities**

The divergence in prices within the commodities sector was a consistent theme throughout 2013, and we see that continuing into 2014. Natural gas continues to move higher as more conversions from coal to gas electricity generation take place in the US. Meanwhile, oil continues to languish owing to the increase in supply in North America. With concerns over inflation being pushed further into the future, we expect gold to continue its current downward trajectory. It has yet to be determined whether the recent artic temperatures in parts of the American Midwest will disrupt wheat supply/demand heading into the Spring, while drought in Argentina may disrupt global corn supplies.

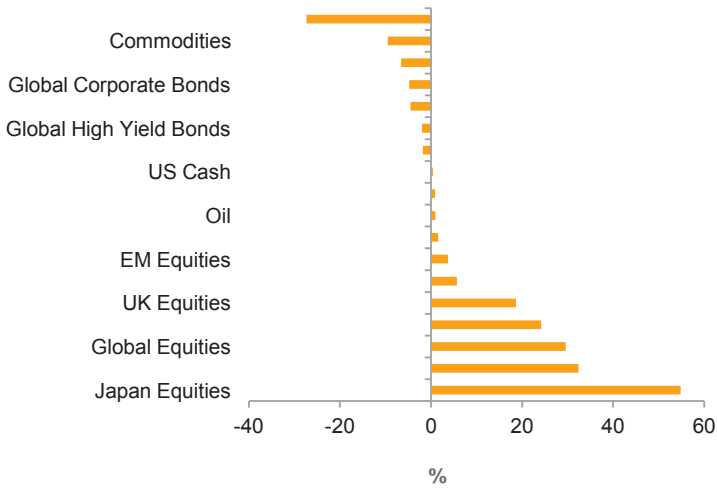
**Currencies**

Currencies continue to be a key area of interest for our group into 2014. There are currently on-going shifts to the long-standing currency market consensus, as the dollar strengthens and Japan starts to show signs of inflation. Meanwhile, tightening monetary policy in the US has the potential to cause turbulence in EM currencies through capital outflows. We are closely watching the interplay of capital flows for current account deficit countries that are also commodity dependent. South Africa ranks near the top of this list, as does Brazil.

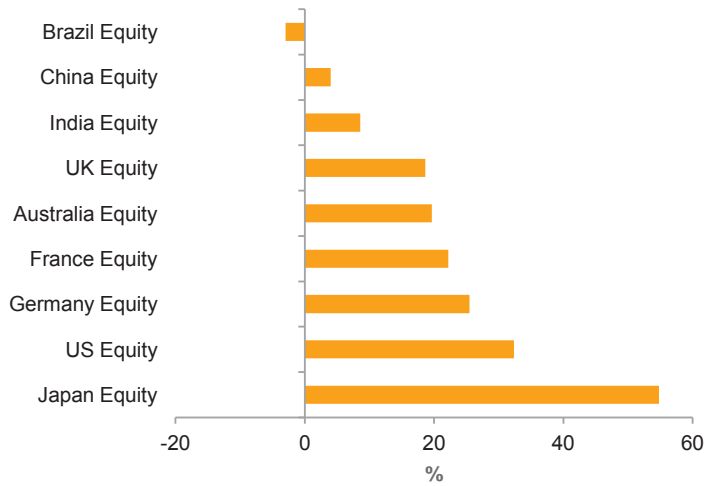
Please see appendix for further information.

# Performance Monitor

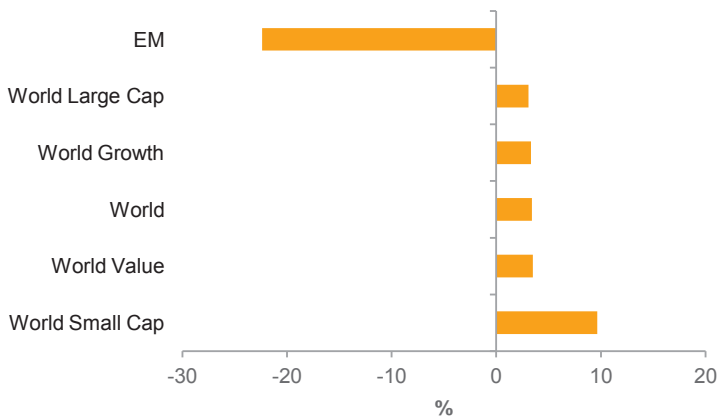
**FIG. 19 : CAPITAL MARKETS**  
% change over 1 year to 31/12/13



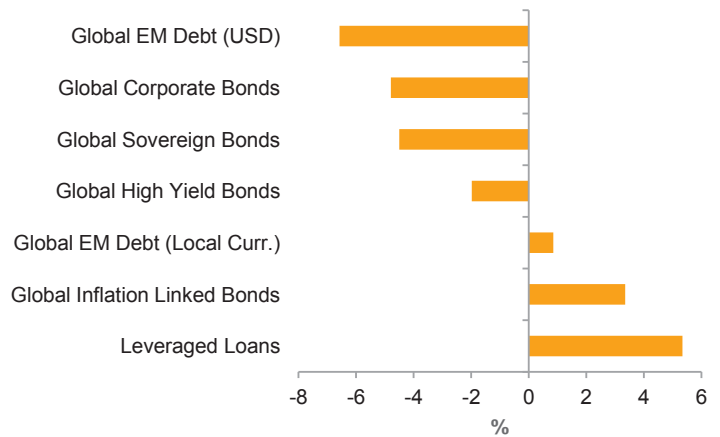
**FIG. 20 : EQUITY COUNTRY INDEX PERFORMANCE**  
% change over 1 year to 31/12/13



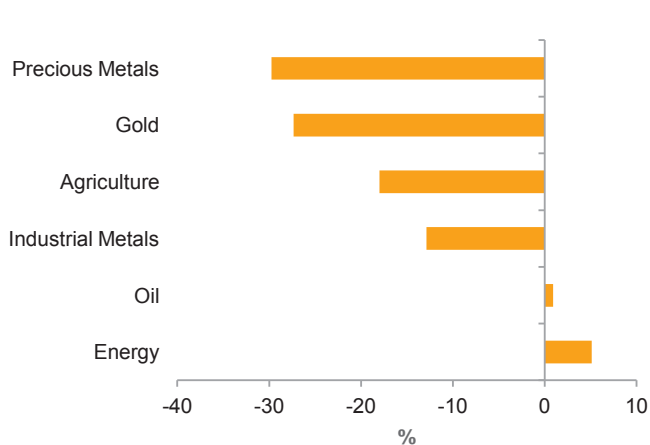
**FIG. 21: GLOBAL EQUITY PERFORMANCE**  
% change vs. MSCI World Index over 1 year to 31/12/2013



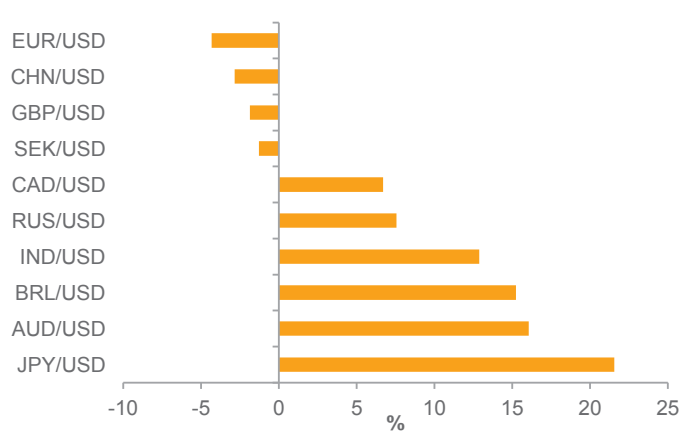
**FIG. 22: FIXED INCOME PERFORMANCE**  
% change over 1 year 31/12/13



**FIG. 23: COMMODITIES PERFORMANCE**  
% change 1 year to 31/12/13



**FIG. 24: FX CURRENCY PAIRS**  
% change 1 year to 31/12/13



# APPENDIX & DISCLOSURES

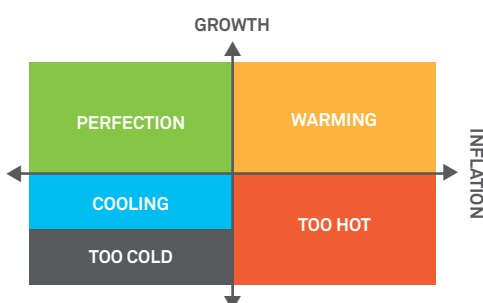
ASSET	INDEX	DEFINITION
Commodities	Dow Jones UBS Commodities Index Total Return (USD Index)	The Dow Jones UBS Commodities index is an index that tracks the performance of broad based commodities.
Gold	Gold Bullion LBM USD/ozt	Tracks the performance of gold bullion spot prices.
Oil	Brent Crude Month FOB USD/BBL	Tracks the performance of Brent Crude Oil spot prices.
Global Sovereign Bonds	JPM Global GBI (USD Index)	Tracks the performance of global sovereign bonds.
Developed Sovereigns		US, UK, Japan, and German Sovereign Debt securities
US Equity	S&P 500 (USD Index)	Tracks the performance of 500 of largest market capitalization equities in the United States.
US Cash	JPM US Cash Index (3M) (USD Index)	Tracks the performance of US 3 month treasury bills.
US Dollar	JPM USD Index Real Broad	Tracks the performance of the US Dollar against a basket of broad currencies.
Global Corporate Bonds	Barclays Global Agg Corp (USD Index)	Tracks the performance of aggregate corporate bonds.
Developed REITS	FTSE E/N Dev REITS (Local Currency)	Tracks the performance of global real estate investment trusts in developed markets.
Global Natural Resource Equities	S&P Gbl Nat Resource Equities (USD Index)	Tracks the performance of global equities linked to natural resources.
Global Investment Grade Bonds	Barclays Inv Grade Corporates (USD Index)	Tracks the performance of aggregate investment grade corporate bonds.
Global Inflation Linked Bonds	Barclays Global Agg Infl-Lkd (USD Index)	Tracks the performance of global inflation linked bonds.
Global High Yield Bonds	Barclays Global High Yield (USD Index)	Tracks the performance of global high yield bonds rates below investment grade.
Global Equities	MSCI World (LC Index)	Tracks the performance of developed market global equities.
MSCI AC World	MSCI AC World Index	Tracks the performance of developed market global equities
Global EM Debt (USD)	JPM EMBI Global Composite (USD Index)	Tracks the performance of dollar based emerging market sovereign bonds.
EM Equities	MSCI Emerging Markets (LC Index)	Tracks the performance of emerging market equities.
UK Equities	FTSE 100 (LC Index)	Tracks the performance of equities domiciled within the United Kingdom.
Europe Ex UK Equities	MSCI Europe ex UK (LC Index)	Tracks the performance of equities domiciled in Europe and not including the UK.
Japan Equity	MSCI Japan (LC Index)	Tracks the performance of equities domiciled in Japan.
Pacific Ex Japan Equity	MSCI Pacific ex Japan (LC Index)	Tracks the performance of equities domiciled in the Asia - Pacific region but not including Japan.
Germany Equity	DAX 30 (LC Index)	Tracks the performance of 30 of largest equity market capitalization companies in Germany.
Eurozone Equity	EuroStoxx 50 (LC Index)	Tracks the performance of 50 of largest equity market capitalizations in the Eurozone.
France Equity	CAC 40 (LC Index)	Tracks the performance of 40 of the largest equity market capitalizations of France.
Australia Equity	ASX All Ordinaries (LC Index)	Tracks the performance of the largest equity market capitalizations of Australia.
Brazil Equity	MSCI Brazil (LC Index)	Tracks the performance of the equities domiciled in Brazil.
India Equity	MSCI India (LC Index)	Tracks the performance of equities domiciled in India.
China Equity	MSCI China (LC Index)	Tracks the performance of equities domiciled in China.
World Growth	MSCI World Growth (LC Index)	Tracks the performance of growth oriented equities as defined by MSCI.
World Large Cap	MSCI World Large Cap (LC Index)	Tracks the performance of large equity market capitalization companies.
World Value	MSCI World Value (LC Index)	Tracks the performance of value oriented equities as defined by MSCI.
World Small Cap	MSCI World Small Cap (LC Index)	Tracks the performance of small equity market capitalization companies.
Leveraged Loans	S&P Leveraged Loan Index (USD Index)	Tracks the performance of leveraged loans.
Global EM Debt (Local Curr.)	JPM GBI Emerging Markets (USD Index)	Tracks the performance of local currency denominated emerging market bonds.
Agriculture	S&P GSCI Agriculture Total Return (USD Index)	Tracks the total return performance of agricultural commodity futures.
Precious Metals	S&P GSCI Precious Metals Total Retn	Tracks the total return performance of futures for precious metals related futures.
Industrial Metals	S&P GSCI Industrial Metals Total Retn (USD Index)	Tracks the total return performance of futures for industrial metals related commodities.
Energy	S&P GSCI Energy Total Return (USD Index)	Tracks the total return performance of futures for energy related commodities.
EUR/USD	EUR/USD	Tracks the performance of the Euro / US Dollar exchange rate.
RUS/USD	RUS/USD	Tracks the performance of the Russian Ruble / US Dollar exchange rate.
CHN/USD	CHN/USD	Tracks the performance of the Chinese Renminbi / US Dollar exchange rate.
SEK/USD	SEK/USD	Tracks the performance of the Swedish Krona / US Dollar exchange rate.
GBP/USD	GBP/USD	Tracks the performance of the British Pound / US Dollar exchange rate.
AUD/USD	AUD/USD	Tracks the performance of the Australian Dollar / US Dollar exchange rate.

ASSET	INDEX	DEFINITION
BRL/USD	BRL/USD	Tracks the performance of the Brazilian Real / US Dollar exchange rate.
CAD/USD	CAD/USD	Tracks the performance of the Canadian Dollar / US Dollar exchange rate.
IND/USD	IND/USD	Tracks the performance of the Indian Rupee / US Dollar exchange rate.
JPY/USD	JPY/USD	Tracks the performance of the Japanese Yen / US Dollar exchange rate.
EUR FX		Tracks the performance of the Euro / US Dollar exchange rate.
GBP FX		Tracks the performance of the British Pound / US Dollar exchange rate.
JPY FX		Tracks the performance of Japanese Yen / US Dollar exchange rate.
EM FX		Tracks the performance of a basket of Emerging Markets currencies versus the US Dollar.
US 10Y Yield		Tracks the performance of the yield on the 10 year US treasury note.
Inflation	Headline Consumer Price Index	Tracks the performance of inflation as reported by respective national economic statistics bureaus.
Growth (PMI)		Tracks the performance of purchasing managers indices in each country to proxy GDP growth.
Surprise vs. Consensus	Citigroup Economic Surprise Index	A measure of economic data reported versus expectations created by Citigroup.
Company Earnings		A proprietary diffusion index of positive and negative analyst earnings estimate revisions.
Monetary Policy		Derived from the futures curve for short term interest rates as indicative of central bank policy.
Inflation Revisions		A proprietary measure of cumulative economist revisions for future levels of inflation in a country.
Growth Revisions		A proprietary measure of cumulative economist revisions for future real economic growth in a country.
EM Currencies	JP Morgan Emerging Market Currency Index	Tracks the performance of a basket of emerging market currencies.
Equity Market Valuation	Schiller PE	Price earnings ratio is based on average inflation-adjusted earnings from the previous 10 years, known as the Cyclically Adjusted PE Ratio (CAPE Ratio), Shiller PE Ratio.
Put/Call Ratio	CBOE Put/Call Ratio	The ratio represents a proportion between all the put options and all the call options purchased on any given day.
Japanese Lending	Bank of Japan Tankan Lending Survey	An economic survey of Japanese business issued by the central Bank of Japan, which it then uses to formulate monetary policy. The report is released four times a year in April, July, October and mid-December.
Euro Loan Growth	ECB Euro Area MFI Loans to Non-Financial Corporations' Annual Growth Rate	Tracks the outstanding amount of credit (or loans) extended to businesses and consumers.
Dollar (Figure 7)	Bloomberg US Dollar Index (DXY Index)	Tracks the performance of the US dollar against a basket of global currencies.
DM Bonds	JPMorgan GBI Global Unhedged LC	Tracks the performance of non-US developed market investment grade corporate bonds denominated in local currency.

## CORRELATION HEAT MAP DEFINITIONS

ASSET CLASS	INDEX — please see above for definitions
World Equity	MSCI AC World (LC Index)
EM Equity	MSCI Emerging Markets (LC Index)
DM Bonds	JPMorgan GBI Global Unhedged
EM \$ Bonds	JPMorgan EMBI Global Composite (USD Index)
DM IG Corps Hedged	Barclays Global Aggregate Corp Index (USD Index)
DM HY Corps Hedged	Barclays Global High Yield (USD Index)
Commodities	Dow Jones – UBS Commodities Index Total Return (USD Index)
Dollar	US Dollar Index

## BNY Mellon ISSG RBAA Regimes:



These benchmarks are broad-based indices which are used for comparative purposes only and have been selected as they are well known and are easily recognizable by investors. Comparisons to benchmarks have limitations because benchmarks have volatility and other material characteristics that may differ from the portfolio. For example, investments made for the portfolio may differ significantly in terms of security holdings, industry weightings and asset allocation from those of the benchmark. Accordingly, investment results and volatility of the portfolio may differ from those of the benchmark. Also, the indices noted in this presentation are unmanaged, are not available for direct investment, and are not subject to management fees, transaction costs or other types of expenses that the portfolio may incur. In addition, the performance of the indices reflects reinvestment of dividends and, where applicable, capital gain distributions. Therefore, investors should carefully consider these limitations and differences when evaluating the comparative benchmark data performance. The foregoing index licensors are not affiliated with The Bank of New York Mellon Corporation, do not endorse, sponsor, sell or promote the investment strategies or products mentioned in this presentation and they make no representation regarding advisability of investing in the products and strategies described herein.



#### FOR MORE INFORMATION, PLEASE CONTACT:

##### GENERAL INQUIRIES & AMERICAS

**Stephen Kolano, CFA**  
Investment Strategist  
617.722.3995  
stephen.kolano@bnymellon.com



##### APAC

**Chris Harris, CFA**  
Investment Solutions Strategist  
+81.3.6756.4637  
chris.harris@bnymellon.com



##### EMEA

**Ivo Batista, CFA**  
Portfolio Strategist  
+44.20.7163.5475  
ivo.batista@bnymellon.com



The views in this presentation are provided by the BNY Mellon Investment Strategy & Solutions Group ("ISSG"). The forecasts contained herein are for illustrative purposes only, not indicative of future results, and are not to be relied upon as advice, interpreted as a recommendation, or be guarantees of performance. In addition, the forecasts are based upon subjective estimates and assumptions about circumstances and events that may not have taken place and may never do so. The models used herein have not been independently verified. In addition, the historical returns used as a basis for the charts are based on information gathered by The Bank of New York Mellon Corporation from third party sources, and have not been independently verified. BNY Mellon Investment Strategy & Solutions Group ("ISSG") is part of The Bank of New York Mellon ("Bank"). In the US, ISSG offers products and services through the Bank, including investment strategies that are developed by affiliated BNY Mellon Investment Management advisory firms and managed by officers of such affiliated firms acting in their capacities as dual officers of the Bank. BNY Mellon Investment Management is one of the world's leading investment management organizations and one of the top U.S. wealth managers, encompassing BNY Mellon's affiliated investment management firms, wealth management organization and global distribution companies. BNY Mellon is the corporate brand of The Bank of New York Mellon Corporation and may also be used as a generic term to reference the Corporation as a whole or its various subsidiaries generally. Products and services may be provided under various brand names and in various countries by subsidiaries, affiliates, and joint ventures of The Bank of New York Mellon Corporation where authorized and regulated as required within each jurisdiction. Products or services described herein are provided by BNY Mellon, its subsidiaries, affiliates or related companies and may be provided in various countries by one or more of these companies where authorized and regulated as required within each jurisdiction. However, this material is not intended, nor should be construed, as an offer or solicitation of services or products or an endorsement thereof in any jurisdiction or in any circumstance that is otherwise unlawful or unauthorized. The investment products and services mentioned here are not insured by the FDIC (or any other state or federal agency), are not deposits of or guaranteed by any bank, and may lose value. **Past performance is not a guide to future performance. The value of investments and the income from them is not guaranteed and can fall as well as rise due to stock market and currency movements. When you sell your investment you may get back less than you originally invested. This is a financial promotion for Professional Clients and/or distributors only. This is not intended as investment advice.** All information relating to the Investment Strategy and Solutions Group (ISSG) has been prepared by ISSG for presentation by BNY Mellon Asset Management International Limited (BNYMAMI). Any views and opinions contained in this document are those of ISSG as at the date of issue, are subject to change and should not be taken as investment advice. BNYMAMI and its affiliates are not responsible for any subsequent investment advice given based on the information supplied. Securities in Canada are offered through BNY Mellon Asset Management Canada Ltd., registered as a Portfolio Manager and Exempt Market Dealer in all provinces and territories of Canada, and as an Investment Fund Manager in Ontario. The enclosed material is confidential and not to be reproduced or redistributed in whole or in part without prior written consent of ISSG. The information in this material is only as current as the date indicated, and may be superseded by subsequent market events or for other reasons. This document should not be published in hard copy, electronic form, via the web or in any other medium accessible to the public, unless authorized by BNYMAMI to do so. No warranty is given as to the accuracy or completeness of this information and no liability is accepted for errors or omissions in such information. This document may not be used for the purpose of an offer or solicitation in any jurisdiction or in any circumstances in which such offer or solicitation is unlawful or not authorized. This document is issued in the UK and in mainland Europe by BNY Mellon Asset Management International Limited, BNY Mellon Centre, 160 Queen Victoria Street, London EC4V 4LA. Registered in England No. 1118580. Authorized and regulated by the Financial Conduct Authority. In Dubai, United Arab Emirates, this document is issued by the Dubai branch of The Bank of New York Mellon, which is regulated by the Dubai Financial Services Authority. This material is intended for institutional investors, professional clients and other qualified sophisticated individuals only and no other person should act upon it. In Singapore, this document is issued by BNY Mellon Investment Management Singapore Pte. Limited whose business address is One Temasek Avenue, #04-02 Millenia Tower, Singapore 039192. Co. Reg. 201230427E. Regulated by the Monetary Authority of Singapore. If this document is used or distributed in Hong Kong, it is issued by BNY Mellon Asset Management Hong Kong Limited to Professional Investors only, whose business address is Level 18, Three Pacific Place, 1 Queen's Road East, Hong Kong. BNY Mellon Asset Management Hong Kong Limited is regulated by the Hong Kong Securities and Futures Commission and its registered office is at 6th floor, Alexandra House, 18 Chater Road, Central, Hong Kong. If this document is used or distributed in Australia, it is issued by BNY Mellon Investment Management Australia Limited (ABN 56 102 482 815, AFS License No. 227865) located at Level 6, 7 Macquarie Place, Sydney, NSW 2000. This material is for wholesale clients only and is not intended for distribution to, nor should it be relied upon by, retail clients. BNY Mellon Asset Management International Limited, any other BNY Mellon entity mentioned are ultimately owned by The Bank of New York Mellon Corporation CP10582-16-10-2013(3M) Valuation Model – The ISSG Valuation Model considers relative valuations across the asset classes that we rank. We consider the current values placed on future cash flows of the securities against their historical longer-term trend levels. Momentum Model – The ISSG Momentum Model considers relative price momentum across the asset classes that we rank. Our research shows that this can be an indicator of continued appreciation potential in the future. RBAA Model – The ISSG Regime Based Asset Allocation Model defines five macroeconomic regimes based on the interaction of growth and inflation expectations. We believe changes to these expectations drive regime shifts and influence asset returns.

本情報提供資料は、BNY メロン・グループ（BNY メロンを最終親会社とするグループの総称です）の資産運用会社が提供する情報について、BNY メロン・アセット・マネジメント・ジャパン株式会社が審査の上、掲載したものです。当資料は情報の提供を目的としたもので、勧誘を目的としたものではありません。当資料は信頼できると思われる情報に基づき作成されていますが、その正確性、完全性を保証するものではありません。ここに示された意見などは、作成時点での見解であり、事前の連絡無しに変更される事もあります。

BNY メロン・アセット・マネジメント・ジャパン株式会社  
BNY Mellon Asset Management Japan Limited

金融商品取引業者：関東財務局長（金商）第 406 号  
〔加入協会〕 一般社団法人 投資信託協会  
一般社団法人 日本投資顧問業協会