

# Global Investment Committee Monthly

## IN BRIEF

## December Meeting Summary

**MARKETS.** We think that Washington will mitigate and delay the looming fiscal cliff and make progress on a credible multiyear deficit-reduction plan. We remain underweight cash, inflation-linked securities and global real estate investment trusts, as well as short duration and developed-market (DM) sovereign and high yield debt. We are overweight (OW) equities, commodities and investment grade and emerging market (EM) bonds, as well as managed futures. We continue to OW both EM and US equities. We are market weight in European equities and underweight in Japanese equities. Within the US, our capitalization preference is large caps and our style preference is growth.

**ECONOMIES.** We expect another year of positive but subpar global growth in 2013, even with Europe in recession and slower growth in the US and Japan. In aggregate, DM economies should post 1% growth while EM economies advance by 5%, yielding global

growth of 3%. DM inflation should remain quiescent, whereas EM inflation will remain close to 5%.

**PROFITS.** We expect consensus S&P 500 earnings-per-share (EPS) growth of 9% in 2013, up from 6% this year. Profit-margin expansion has likely peaked, but EPS should grow slightly faster than sales given still positive productivity growth and share buybacks. Profit growth will likely reaccelerate in 2014 on better global growth.

**INTEREST RATES.** DM central-bank policy rates are likely to remain low into 2015. The Federal Reserve has embarked on an open-ended third round of Quantitative Ease. The European Central Bank has committed open-ended support to EU sovereign debt markets. Finally, several EM central banks are still easing to offset slower global growth.

**CURRENCIES.** In the short term, we expect US-dollar strength versus the euro. Longer term, major DM currencies will likely decline against several EM currencies.

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## Summary of Strategic & Tactical Allocations for Global Investment Committee Asset Allocation Models

The table below summarizes our best thinking on the construction of strategic portfolios and tactical asset allocation. These three portfolios are a sampling of our guidance for investors with more than \$20 million of investable assets, which are a subset of the GIC asset allocation models that are shown starting on page 18. The strategic equity allocations in these portfolios are in proportion to their share of global market capitalization.

EFFECTIVE NOV. 9, 2012

Model	Moderate Balanced Strategic Weight	Tactical Relative Weight	Equity & Alternative Investments Strategic Weight	Tactical Relative Weight	All Bonds Strategic Weight	Tactical Relative Weight
Global Cash	5%	-2%	0%	0%	25%	-2%
Global Bonds	40	-2	0	0	75	2
Global Equities	32	3	70	-1	0	0
Global Alternative/Absolute Return Investments	23	1	30	1	0	0
<b>Global Bonds</b>						
Investment Grade	30	-1	-	-	65	3
Short Duration	5	-3	-	-	10	-3
Government/Government-Related	18	-8	-	-	39	-12
Corporate & Securitized	7	10	-	-	16	18
Inflation-Linked Securities	3	-1	-	-	10	-1
High Yield	4	-1	-	-	-	-
Emerging Markets	3	1	-	-	-	-
<b>Total Bonds</b>	<b>40</b>	<b>-2</b>	-	-	<b>75</b>	<b>2</b>
Total Cash & Short Duration Bonds	10	-5	-	-	35	-5
<b>Global Equities</b>						
US Large	12	3	24	4	-	-
Growth	6	3	12	5	-	-
Value	6	0	12	-1	-	-
US Mid	2	0	4	0	-	-
Growth	1	0	2	0	-	-
Value	1	0	2	0	-	-
Canada	1	0	3	0	-	-
Europe	6	0	14	0	-	-
Europe ex UK	4	0	9	0	-	-
UK	2	0	5	-2	-	-
Developed Asia	3	-2	8	-5	-	-
Japan	2	-2	5	-5	-	-
Asia Pacific ex Japan	1	0	3	0	-	-
US Small	2	0	4	0	-	-
Growth	1	0	2	0	-	-
Value	1	0	2	0	-	-
World ex US Small Cap	2	0	4	0	-	-
Emerging Markets	4	2	9	2	-	-
<b>Total Equities</b>	<b>32</b>	<b>3</b>	<b>70</b>	<b>-1</b>	-	-
US Equity	16	3	32	4	-	-
Developed Market ex US	12	-2	29	-7	-	-
Developed Market Equity	28	1	61	-3	-	-
Emerging Market Equity	4	2	9	2	-	-
<b>Global Alternative/Absolute Return Investments</b>						
REITs	3	-1	2	2	-	-
Commodities	2	1	5	1	-	-
Managed Futures Funds	4	1	5	0	-	-
Hedge Funds	11	0	10	0	-	-
Private Real Estate	-	-	3	0	-	-
Private Equity	3	0	5	0	-	-
<b>Total Alternative/Absolute Return Investments</b>	<b>23</b>	<b>1</b>	<b>30</b>	<b>1</b>	-	-

Source: Global Investment Committee as of Nov. 9, 2012

## Tactical Asset Allocation Reasoning

Global Bonds	Relative Weight Within Bonds	
Short Duration	Underweight	With yields extremely low in many markets, relative performance over any reasonable holding period will lag except in an environment of negative returns on risk assets.
Government	Underweight	The price of safety is very expensive in perceived safe-haven markets. We see better value elsewhere.
Investment Grade Corporate & Securitized	Overweight	These securities offer an attractive combination of high credit quality and yields that are somewhat above those on safe-haven government bonds. In the US, securitized bonds are benefiting from the Federal Reserve's Quantitative Ease (QE) purchases.
Inflation-Linked Securities	Underweight	With breakeven rates a bit above their long-term averages, we see better value elsewhere.
High Yield	Underweight	Yields are near record lows; further upside seems limited.
Emerging Markets	Overweight	The yield spread is above its long-term trend line.

Global Equities	Relative Weight Within Equities	
US	Overweight	At the capitalization level, our preference is large caps; at the style level, our preference is growth against a backdrop of decelerating earnings growth. Relative-valuation readings also support these positions.
Developed Markets ex US	Underweight	At the regional level, we are market weight the Europe ex UK region, Canada and the Asia Pacific ex Japan region (predominantly Australia); we are underweight Japan, where challenges to economic growth appear to be structural as well as cyclical.
Emerging Markets	Overweight	Policymakers' focus has generally shifted away from containing inflation and toward supporting growth. Recent indications that growth in China's economy has stopped decelerating are encouraging.

Global Alternative/Absolute Return Investments	Relative Weight Within Alternative Investments	
REITs	Underweight	Further upside seems limited against a backdrop of slowing global economic growth. For US real estate investment trusts, the dividend yield spread versus the S&P 500 dividend yield is well below its long-term average.
Commodities	Overweight	Prior rounds of Fed QE have been associated with higher commodity prices, especially in the precious metals sector. Still, much depends on the strength of emerging market economies, especially China.
Managed Futures	Overweight	As a partial hedge against a less favorable outcome than our base case, we remain tactically overweight. This asset class often provides protection during extended periods of adverse financial market conditions.

## 2013: A Good Year Ahead for Equities

Accommodative global central-bank policy, more sensible US fiscal policy and attractive valuation support this positive outlook.

**A**s we peer into the new year, the overwhelming policy variable for markets and the global economy is monetary policy. The two primary global central banks—the US Federal Reserve and the European Central Bank (ECB)—continue to run record accommodative policies to bolster markets and global economic growth.

The continuation of the Fed's Quantitative Ease 3 (QE3) into 2013, along with a further expansion of the central bank's balance sheet, provides ongoing support to growth. Given that the Fed's target US GDP growth rate for 2013, at 2.65%, is optimistic relative to consensus forecasts, the Fed will likely remain accommodative into mid 2015 in pursuit of that goal. Meanwhile, in Europe, the ECB has put in place the Outright Monetary Transactions (OMT) program, the

European version of QE that is designed to backstop European nations' sovereign debt markets. While OMT has yet to pay out a single euro, its creation underpins European and, by extension, global risk-asset prices.

**NEGLIGIBLE DRAG.** As for US fiscal policy, we expect an agreement is imminent to mitigate and delay the negative economic effect of the looming fiscal cliff, averting a potential 5% GDP drag on the US economy. We had been expecting some fiscal drag on the order of 1% to 2% of GDP, mainly due to the expiration of both the current payroll-tax relief and extended jobless benefits. Now, with both back on the table in current negotiations, it is possible that the 2013 fiscal drag will be negligible. In any case, as it becomes more apparent that Washington will avoid the cliff and adopt a more sensible

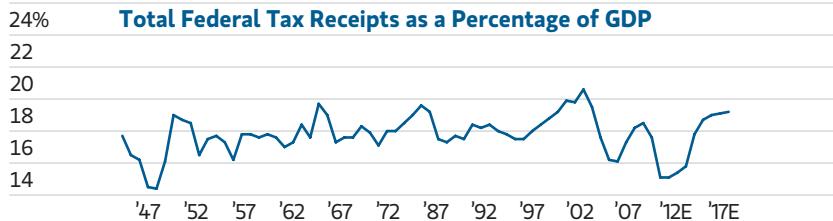
fiscal policy, risk-asset markets should respond positively.

There's also a rising probability that Washington will deliver a "grand bargain"—a credible multiyear deficit-reduction package—later this month. That would be a big deal. If left unaddressed, this longer-term deficit problem threatens to trigger another US credit downgrade, a weaker—maybe much weaker—dollar, higher debt-maintenance costs and, ultimately, a lower US standard of living than would otherwise be the case.

**TACKLING TAXES.** In reaching a deal, the major political hurdle for Republicans has been an aversion to raising taxes. President Obama campaigned for higher tax rates on upper-income taxpayers, effectively reverting to the top income tax rates in effect before the Bush tax cuts. Since the election, the GOP made concessions on revenue increases, in

### Figure 1: Taxes Relative to GDP Are at a 62-Year Low

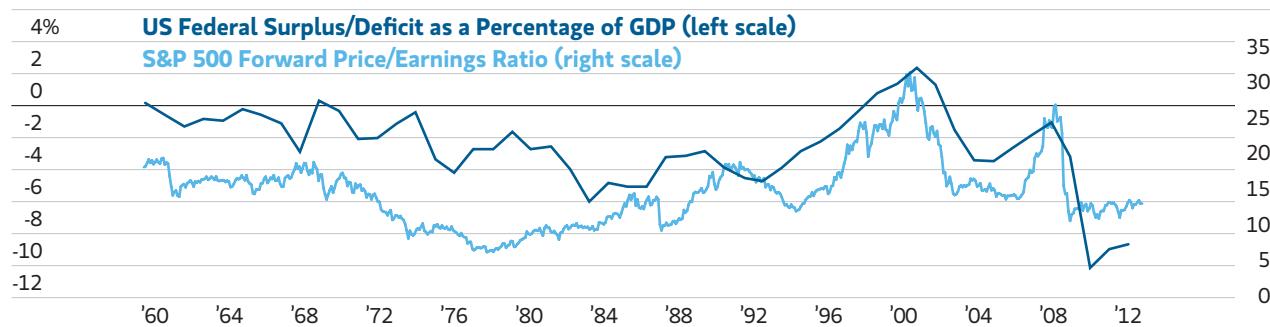
Those who argue that taxes need to go up to help close the deficit point to this chart. Tax receipts as a percentage of GDP have not been this low since 1950.



Source: Office of Management and Budget as of April 13, 2012

### Figure 2: Lower Deficits Facilitate Higher Price/Earnings Ratios

History shows that when the federal deficit as a percentage of GDP goes down the stock market's price/earnings ratio goes up. This suggests a deficit deal would be positive for equities.



Source: Citi Research as of Nov. 30, 2012

part because federal tax receipts as a share of GDP is at a 62-year low (see Figure 1, page 4) and in part because polls show the public favors a combination of higher revenues and lower spending to rein in deficits. The lesser political hurdle facing the White House has been entitlement spending such as Social Security and Medicare but, as a practical matter, everyone knows that any credible fiscal plan must include entitlements.

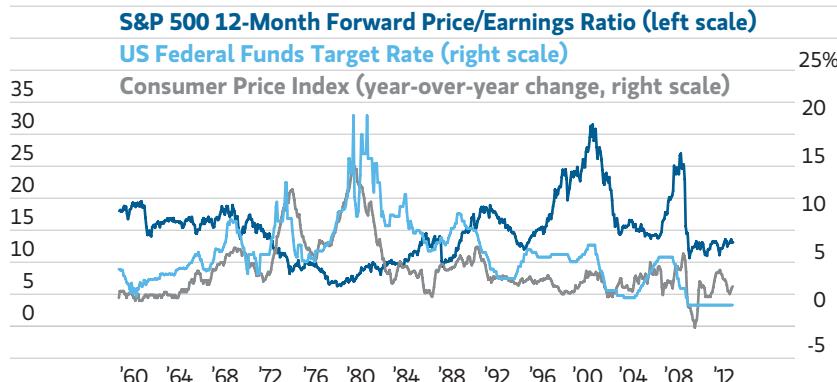
For now, the White House and congressional Republicans have offered competing fiscal plans and the parameters of the debate are largely known. By January, we expect that Washington will come to an agreement on a credible long-term deficit-reduction framework. While that will create a multiyear fiscal drag on the economy, it should be offset to some extent by a very accommodative Fed.

**DEFICIT LINK.** As we've noted before, there is an important relationship between the deficit share of GDP and the price/earnings multiple (P/E) on the stock market. History shows that when the deficit goes down, the P/E goes up (see Figure 2, page 4). Thus, we think that the US political risk to the stock market is to the upside next year, namely in P/E expansion. Higher equity prices further bolster consumer and corporate balance sheets and, by extension, the business-cycle expansion.

**VALUATION PROPS.** In terms of valuation, the US stock market appears attractively valued on several different metrics. For example, considering today's low interest rates and low inflation, the S&P 500's P/E is quite modest (see Figure 3). The stock market is also undervalued on another metric, Tobin's Q Ratio, which is the ratio of the market value of corporate equities to the replacement value of corporate assets (see Figure 4). When the Q Ratio is below 1.0, the replacement value exceeds the equity value and, thus, stocks are modestly valued. Currently, the ratio is 0.9, which provides a foundation for positive annualized equity returns in the years ahead (see Figure 5).

### Figure 3: Given Interest Rates and Inflation, Stocks Are Modestly Priced

The price/earnings ratio (P/E) for the S&P 500 is modest considering that interest rates and inflation are so low. In the past, the P/E has been higher when interest rates and inflation were low.



Source: Bloomberg, Citi Research as of Nov. 30, 2012

### Figure 4: Tobin's Q Ratio Shows Stocks Modestly Valued

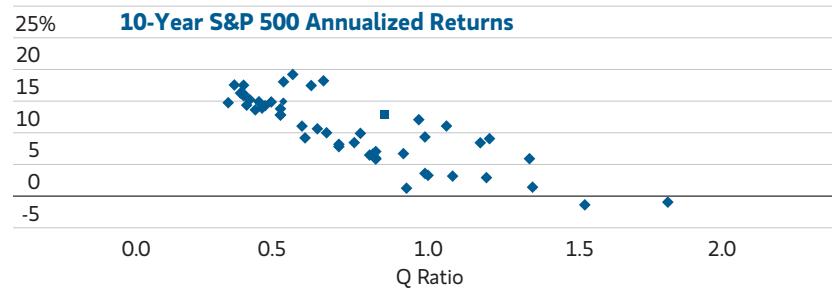
Tobin's Q Ratio is the ratio of the market value of corporate equities to the replacement value of corporate assets. When the ratio is below 1.0, as it was at its last reading, stocks are undervalued relative to companies' assets.



Source: Bloomberg, Haver Analytics, US Federal Reserve as of Dec. 31, 2011

### Figure 5: Lower Q Ratio, Higher Equity Returns

In general, the lower the Q Ratio at a given point, the higher equity returns are over the subsequent 10-year period.



Source: Bloomberg, Haver Analytics, Federal Reserve as of Jan. 31, 2012

**EURO PROGRESS.** Turning to Europe, while the economy remains in recession and is unlikely to recover until 2014, European policymakers continue to take steps to preserve the euro, strengthen their common market and begin to address recapitalizing their banks. Next year, we expect Europe to make further progress in creating a common financial regulatory authority, setting up a deposit-insurance program and evolving toward a common fiscal policy. Ultimately, we expect that a Eurobond market will largely supplant national sovereign debt markets. Over time, too, the ECB needs to obtain the authority to operate as a true lender of last resort.

## Economic and Earnings Outlooks

Given a good global policy underpinning, Morgan Stanley economists expect global GDP to stabilize in 2013, at just above 3%, despite another year of recession in Europe. As that recession ends in 2014, growth should accelerate to 4%. Inflation should be largely stable both years (see Figure 7, page 8). Emerging market (EM) GDP growth should improve in 2013 versus 2012, while US and total developed-market (DM) GDP growth is not expected to improve until 2014.

With the nominal global growth forecast at 6% in 2013, global earnings per share (EPS) should be 11%, which is the consensus estimate. Labor-force productivity growth, while slowing, remains positive. What's more, the S&P 500 is not the same as global GDP; there is a success bias to S&P 500 Index composition as failing companies exit the index and new ones enter. For example, this year Kraft Foods entered the index and Sears exited. Finally, EPS growth can benefit from share buybacks.

Factoring in those two things, EPS growth should modestly exceed sales (see Figure 9, page 10). For 2014, given nominal global GDP growth of more than 7%, EPS growth should be stronger than in 2013 but below the consensus estimate of 12%. All told, decent EPS growth alongside P/E expansion should drive handsome equity returns in 2013 and 2014.

## Figure 6: High Yield Bond Yields Fall Below the Earnings Yield on Stocks

The yield on high yield bonds is now below the earnings yield on stocks for the first time since the inception of the high yield market. This is another sign that high yield bonds are overvalued.



Source: Bloomberg, The Yield Book as of Nov. 30, 2012

## Tactical Positioning Into the New Year

Heading into 2013, we have a modest overweight position in risk assets, based mainly on our policy outlook. We are tactically overweight (OW) US and EM equities, neutral to Europe ex UK and underweight (UW) Japan (see page 3). Within the US, our capitalization preference remains large caps and our style preference continues to be growth. The rationale for these preferences is further explained in the equities outlook section (see page 10).

## Investment Grade Corporate Bonds, Securitized Bonds and Emerging Market Debt

The persistence of low interest rates and rising stock values has further strengthened corporate balance sheets. Thus, investment grade corporate bonds continue to offer an attractive combination of yields that are higher than those on traditional safe havens, such as US Treasuries, while still providing high credit quality. Securitized bonds should continue to benefit from the Fed's QE purchases. Moreover, a growing share of EM debt is rated investment grade. Finally, we expect many underlying EM currencies to appreciate to the dollar over time.

## High Yield Bonds

We remain modestly UW high yield bonds, based mainly on valuation. Notably, the earnings yield on the S&P 500 is now higher than the yield on high yield debt for the first time since the inception of the high yield market (see Figure 6). In addition, the yields on these bonds are near record lows and prices are generally well above par, creating a natural barrier to additional price gains, given existing call provisions. Also, the spread between high yield and investment grade corporate bonds has narrowed during the last several months and is now below average.

## Commodities, Including Gold

As an economically sensitive asset class, commodities should deliver positive returns with decent global growth, led by the faster-growing EM economies. In addition, EM economic growth is generally more resource intensive than DM economic growth.

Moreover, we expect policymakers in many emerging economies to undertake additional stimulative fiscal policies in order to support domestic demand. We also note that previous rounds of the Fed's QE appear to have given a lift to commodities, particularly gold and other precious metals; QE3 should do the same.

## **Cash, Short Duration Bonds and Inflation Linked Securities**

Central banks in developed countries are holding short-term rates at exceptionally low levels to induce investors to shift into riskier, higher-yielding assets. Opting to not “fight the Fed,” we remain UW these defensive asset classes. With yields at nearly zero—and negative in real, inflation-adjusted terms—the returns from these instruments for any reasonable holding period will only be attractive if there are declines in other investment options. While such

declines are always a possibility, we do not assign them a high probability. Inflation is expected to be contained in 2013 and 2014.

## **Mindful of the Risks**

While we are selectively OW risk assets, we have stopped well short of a maximum OW position in equities because we recognize that the environment remains challenging. First, with growth still slowing, the global economy is more vulnerable to shocks than would be the case if growth were

accelerating. We also note that there is a risk that the fiscal cliff will not be navigated as well as we expect. Moreover, Washington may bungle progress, at least for a time, on credible multiyear deficit reduction. Elsewhere, European policymakers have yet to agree to a stimulative fiscal-policy response to recession. We continually evaluate our risk exposure and tactical positioning. As new challenges and opportunities appear, we will make adjustments to our tactical asset allocation as warranted. ■

## Economic Outlook

### The New Year Should Look Familiar

The global growth outlook for 2013 appears to be much like that of the past few years. Once again, both Morgan Stanley and Citi economists look for modest overall global growth—but with marked divergences between regions and countries (see Figure 7). Emerging market (EM) economies are expected to lead the way yet again, with the developed world following well behind.

To provide perspective, global GDP for 2013 is projected to be 3.1%, which is essentially identical to the expected final tallies for 2012. As for EM growth, Morgan Stanley economists estimate 5.4% and Citi economists, 5.3%. This level of activity would represent measurable improvement from the respective 2012 estimates of 4.9% and 4.7%.

Of course, if the EM economies are expected to do better and global growth is flat, that indicates a falloff in the developed markets (DM). Specifically, Morgan Stanley looks for the DM countries to record just 0.7% growth, a slowing from this year's expectation for an already sluggish 1.2%; Citi anticipates a similar slowing to 0.9%.

**CHINESE POWER.** Although China's economy is transitioning to a more moderate growth path, it should remain a powerful contributor to the global economy. Indeed, Morgan Stanley sees Chinese GDP expanding at 8.2% next year, while Citi's projection looks for little change at 7.6%. In either case, China is expected to account for some 40% of 2013 global GDP growth. In addition, investment spending in 2013 will most likely exceed the outlays from the US and Euro Zone combined.

### Figure 7: Morgan Stanley and Citi Global GDP and Inflation Forecasts

(year-over-year percent change)

Morgan Stanley	% Contribution to Growth				Citi	% Contribution to Growth			
	2012	2013	2014	2013		2012	2013	2014	2013
Global GDP	3.1	3.1	4.0		Global GDP	3.1	3.2	3.5	
Developed Economies	1.2	0.7	1.9	21	Developed Economies	1.2	0.9	1.5	22
US	2.2	1.4	2.7	15	US	2.1	1.8	3.0	15
Euro Zone	-0.5	-0.5	0.9	-2	Euro Zone	-0.4	-0.7	-0.1	0
UK	-0.2	0.8	1.6	0	UK	-0.3	0.7	0.8	0
Japan	1.7	0.4	0.8	3	Japan	2.0	0.9	0.2	4
Developing Economies	4.9	5.4	5.9	79	Developing Economies	4.7	5.3	5.3	78
Brazil	1.6	2.8	3.4	2	Brazil	1.4	3.9	4.0	2
Russia	3.6	3.1	3.7	4	Russia	3.5	4.0	4.1	4
India	5.0	6.1	6.9	11	India	5.4	6.2	6.9	12
China	7.7	8.2	8.0	39	China	7.7	7.6	7.3	40
Global Consumer Prices									
Global Inflation	3.4	3.1	3.3		Global Inflation	3.2	3.3	3.3	
Developed Economies	2.0	1.4	1.7		Developed Economies	1.9	1.8	1.9	
Developing Economies	4.8	4.8	4.8		Developing Economies	4.5	4.7	4.8	
US Core*	2.3	2.2	2.2		US Core*	1.8	1.6	1.6	
US CPI	2.1	1.3	1.6		US CPI	1.8	1.9	1.9	

Note: Global forecasts are GDP-weighted averages, using Purchasing Power Parity estimates, which give greater weights to developing economies.

\*Personal Consumption Expenditure

Source: Morgan Stanley Research, Citi Research, Morgan Stanley Smith Barney as of Dec. 11, 2012

True, China's projected growth is noticeably lower than its 2009-to-2011 pace of between 9.2% and 10.4%, but it is still estimated to be at levels that would make the DM world envious.

**EURO ZONE FUNK.** In terms of the least favorable outlook, the Euro Zone stakes that claim with continued recessionary conditions. Morgan Stanley economists anticipate a 0.5% decline in GDP; Citi forecasters see a 0.7% fall. In fact, we believe that GDP estimates could be revised lower in the months ahead. What's more, continued deleveraging, fiscal austerity and tight financing conditions are not likely to let up soon and may continue into 2014. The region's economic contraction is expected to be concentrated in the peripheral countries, but the core countries are vulnerable as well. German growth is projected to be below 1% next year, with France modestly in the negative column. The two most

discussed nations at this point, Spain and Italy, are forecast to have even deeper outright contractions.

**BEYOND THE CLIFF.** For the US, the gorilla in the room remains the fiscal cliff. Both Morgan Stanley and Citi economists assume some type of compromise in their forecast but, within that context, they also factor in some fiscal austerity that will dampen growth prospects. Each of these economics teams see GDP straddling the 1.5% line—a slowing from 2012's expected 2.2% pace. Given the already modest starting point for growth, it is reasonable to expect the US economy to head into a recession if the cliff is not avoided.

Along these lines, we believe that 2012 will have a soft ending. Though the US economy grew by 2.7% in the third quarter, Morgan Stanley economists anticipate GDP growth will fall to below 1% in the final three months of the year. Essentially, the forces that

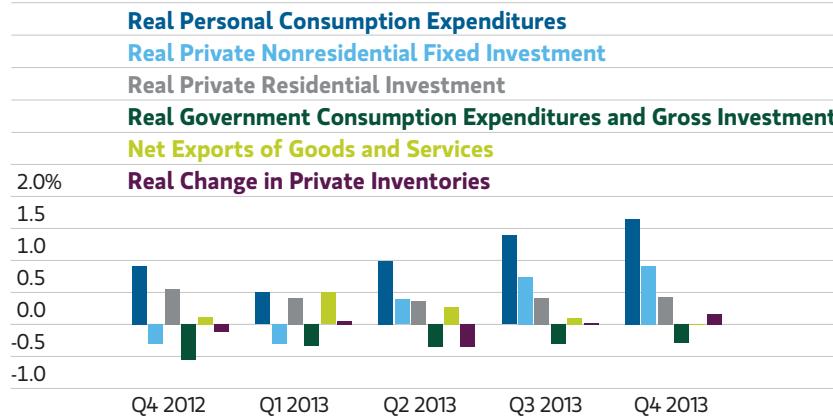
produced outsized economic activity from July through September are apt to be reversed in the current quarter, especially when it comes to inventories. For instance, the real change in private inventories contributed more than 0.75 percentage points to third-quarter GDP but is expected to shift into the negative column in the fourth quarter.

**GROWTH SPOTS.** Looking ahead, the contribution from real personal consumption expenditures (PCE) should continue to drive growth. In fact, after a brief deceleration in the first quarter of 2013, real PCE is expected to register a rising trend in the subsequent three quarters (see Figure 8). A key drag on growth in recent years, housing, or real private residential investment, may become an integral part of GDP growth. Morgan Stanley economists are forecasting housing to be a positive contributor throughout next year, building on the improvement that had been evident in recent months.

An area where we had expected to see a reversal in the fourth quarter and

## Figure 8: Estimates of What's Driving Real GDP

Morgan Stanley economists expect a slowdown in personal consumption this quarter and next, followed by a gradual improvement during 2013. Real private residential investment, or housing, is forecast to be a solid contributor to growth this quarter and next year.



Source: Morgan Stanley Research as of Dec. 5, 2012

outright negative performance in 2013 is government expenditures. In the third quarter, government spending was an important driver for overall growth, but this trend was not sustainable. Morgan

Stanley expects real government consumption and investment to be a drag of more than half a percentage point in the fourth quarter and one-third of a percentage point in each quarter of next year. ■

## Equities Outlook

### Higher Prices Despite Lower Earnings

At the beginning of 2012, the Morgan Stanley estimate for global GDP growth for the year was 3.5% and the consensus estimate for earnings-per-share (EPS) growth for the MSCI All Country World Index, our proxy for the global equity market, was about 10%. Those forecasts have proven to be optimistic. The Morgan Stanley estimate for GDP growth has come down to 3.1% and the consensus EPS growth estimate has slipped to 4.0% (see Figure 9). Despite these downgrades, the global equity index has gained 16% for the year to date through Dec. 11.

**DECOPLED.** We believe the primary explanation for the equity market's surprising strength is the policy response from the world's central banks, which has included traditional and nontraditional means of providing added liquidity. These practices have essentially allowed global equity prices to decouple from the deteriorating fundamental backdrop as central-bank liquidity has looked for a home. With yields on many traditional safe-haven investments such as cash and government bonds at or near historic lows, equity market results indicate that some of this liquidity is finding its way into stocks, which are offering higher yields (see Figure 10).

**US VIEW.** The story for the 2012 US equity market is similar. Although 2% GDP growth is about what was expected, the consensus estimate for EPS growth on the S&P 500 Index has come down from around 10% at the start of the year to 6% now. Yet, the S&P has increased 16% so far this year. Strong price

### Figure 9: Earnings Forecasts for the Standard & Poor's 500, MSCI All Country World and MSCI Emerging Markets Indexes

S&P 500					
	Morgan Stanley		Citi		
	Operating EPS	YOY Change	Operating EPS	YOY Change	
2012	\$100.00	2%	\$103.00	5%	
2013	\$99.00	-1%	\$108.00	5%	
2014	\$110.00	11%	\$113.00	5%	

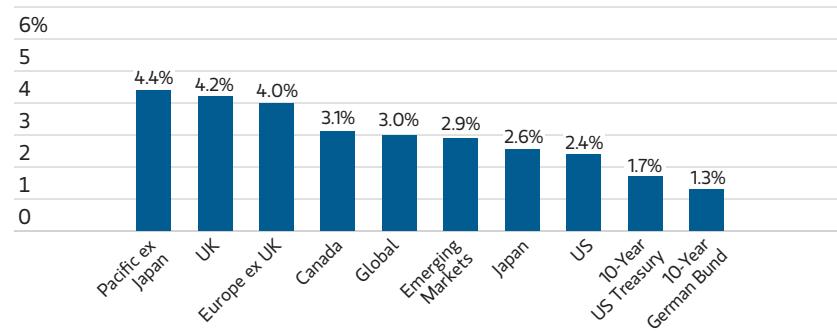
Consensus of Wall Street Analysts						
	S&P 500		MSCI All Country World	MSCI Emerging Markets		
	Operating EPS	YOY Change	Operating EPS	YOY Change	Operating EPS	YOY Change
2012	\$102.28	6%	\$24.97	4%	\$88.28	4%
2013	\$111.76	9%	\$27.80	11%	\$99.49	13%
2014	\$124.64	12%	\$30.95	11%	\$109.52	10%
52-Week Forward	\$112.41		\$27.79	\$99.48		

Note: Citi estimates are before write-offs.

Source: Citi Research, Morgan Stanley Research, Thomson Financial, Datastream as of Dec. 11, 2012

### Figure 10: Region by Region, Dividends Trump 10-Year Government Bond Yields

Taken globally, by region or by country, dividends from owning stocks pay more than the interest earned on a 10-year US Treasury or a German bund. This is an important valuation prop for global equity markets.



Source: Citi Research, Worldscope, MSCI, FactSet as of Dec. 7, 2012

gains coupled with EPS downgrades have raised certain equity-valuation metrics. For instance, when the year began, the forward price/earnings ratio was around 12.0, whereas currently it is 12.6. Still, this is well below the long-term average of 14.0, implying that US stocks are not expensive by historical standards. Current valuation looks even more compelling when

today's low inflation and low interest rate environments are taken into account (see Figure 3, page 5).

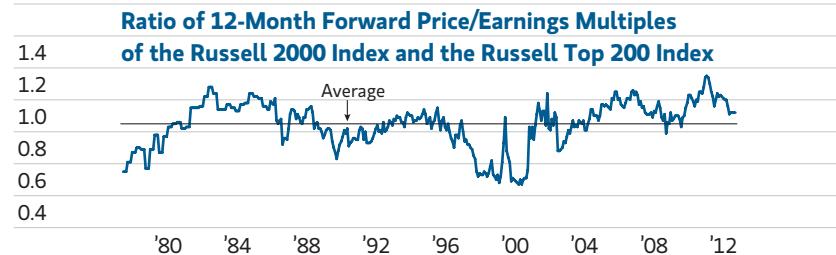
Based on a view that current central-bank liquidity policies will continue for the foreseeable future and equity valuations are not stretched, we are comfortable with a tactical overweight position. We expect the US market to continue to be the primary beneficiary of

the Fed's accommodative policy stance. Within US equities, our capitalization preference remains large caps and our style preference remains growth. Relative-valuation readings support these positions (see Figure 11 and Figure 12). Moreover, a defensive bias seems appropriate against a backdrop of decelerating corporate-earnings growth.

**EMERGING MARKETS.** We also are tactically overweight to emerging market equities. Policymakers in many emerging economies have been gradually utilizing their latitude to make changes that support domestic demand. Importantly, there have been recent indications that growth in China's economy has stopped decelerating. This development should begin to attract increased capital flows, resulting in improved equity market performance in the months ahead. ■

## Figure 11: Large Caps Remain Attractive Relative to Small Caps

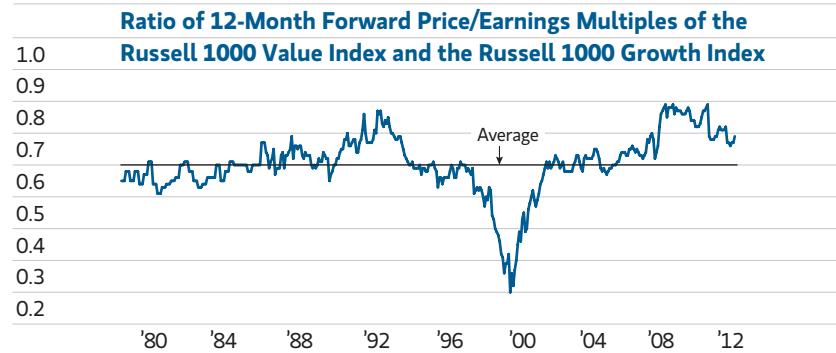
Historically, the price/earnings ratio (P/E) of small-cap stocks is, on average, 1.1 that of the P/E on large-cap stocks. When small caps trade at a higher P/E, large caps are considered the better value.



Source: Thomson Financial, FactSet as of Nov. 30, 2012

## Figure 12: The Value Remains in Growth Stocks

During the past 30 years, the price/earnings ratio (P/E) of value stocks has been, on average, 0.7 that of the P/E on growth stocks. When value stocks' P/E is higher than 0.7, growth stocks are considered more attractive.



Source: Thomson Financial, FactSet as of Nov. 30, 2012

## Fixed Income Outlook

### Easy Money

A common thread running through monetary policy around the globe is that it will remain easy. From the US and Europe to many emerging markets, the bottom-line message is that extraordinarily accommodative policy will stay in place for essentially all of next year. In fact, within the developed markets, central bankers view themselves as a counterweight to the potential drag coming from more austere fiscal policies.

Although the European Central Bank (ECB) refrained from lowering the refi rate at its December policy meeting, the market still expects at least one more 25-basis-point cut.

Along these lines, ECB President Mario Draghi mentioned in his post-meeting remarks that the decision to keep rates steady at 0.75% was not a unanimous one. Rather, some members of the governing council supported a rate cut, leading investors to believe a path has been set for such action early in the new year. Both Morgan Stanley and Citi interest rate forecasts call for such a cut in the first quarter (see Figure 13).

**QE3 WITH A TWIST.** The Federal Reserve is showing no signs of letting up on its aggressive policy. The central bank has told the markets that there would need to be a sustained trend of improvement in the labor markets before it would consider a change in policy and, even then, the policy would likely remain in place for a time after signs of a recovery are apparent. In fact, this thought process was on full display at the Fed's December policy meeting, wherein the end of Operation Twist morphed into a new and more

### Figure 13: Morgan Stanley and Citi Policy Rate and Government Bond Yield Forecasts

Morgan Stanley	Current Rate	1Q13	4Q13	Citi	Current Rate	1Q13	4Q13
Policy Rate (%)				Policy Rate (%)			
US	0.00–0.25	0.15	0.15	US	0.00–0.25	0.25	0.25
Euro Zone	0.75	0.50	0.50	Euro Zone	0.75	0.50	0.25
Japan	0.10	0.05	0.05	Japan	0.10	0.10	0.10
UK	0.50	0.50	1.00	UK	0.50	0.50	0.50
China	6.00*	6.25*	6.75*	China	3.00**	3.00**	3.25**
10-Year Government Bond Yield (%)				10-Year Government Bond Yield (%)			
US	1.66	1.84	2.24	US	1.66	1.75	2.55
Germany	1.33	1.42	1.68	Germany	1.33	1.75	1.50
Japan	0.69	0.95	1.20	Japan	0.69	1.10	1.30
UK	1.82	1.74	2.20	UK	1.82	1.80	1.75

\*Morgan Stanley's current and forecast policy rates use the one-year lending rate.

\*\*Citi's current and forecast policy rates use the one-year deposit rate.

Source: Morgan Stanley Research, Citi Research as of Dec. 11, 2012

forceful form of Quantitative Ease—"QE3+" or "QE4," as some have dubbed it. In other words, the Fed has taken its current plan to purchase \$40 billion in mortgage-backed securities per month and added \$45 billion in Treasuries to the shopping list. Once again, policymakers have introduced this as an open measure with no specific limit on the duration of the program or its size.

Surprisingly, the Federal Open Market Committee (FOMC) also adopted a change in its rate-guidance language. Fed officials have previously commented about switching from the current calendar-based approach, such as "mid 2015," to economic targets such as the unemployment rate falling below a certain rate or inflation rising above a particular level. The speculation, though, was that the change would not happen until next year.

However, on Dec. 12, the Fed announced it would switch to unemployment and inflation targets. Specifically the new guidance for sticking with the current low fed-funds rate is "as long as the unemployment rate remains above 6.5%, inflation one-to-two years ahead is projected to be no more than a half percentage point above the FOMC's 2% longer-run goal and longer-term inflation expectations continue to be well anchored." The Fed said it believes this new language is "consistent with its earlier date-based guidance."

**FED FORECASTS.** The potential shift in focus from a calendar-based policy to one linked to economic data increases the importance of the Fed's various central-tendency forecasts. Much like the private analytical community, the Fed tends to adjust growth estimates throughout the year but usually seems to come in on the high side, at least recently. This overshoot tends to provide the policymakers some cover when enacting further easing measures. For example, the central-tendency estimate for real GDP in November 2011 looked for a gain of 2.5% to 2.9% in 2012. The most recent forecast now places this year at 1.7% to 1.8%. For 2013, the central-tendency-estimate range is 2.3% to 3.0%—well above the Morgan Stanley and Citi forecasts of 1.4% and 1.8%, respectively.

### The Big Gains Are Over for Credit

During 2012, a year of slowing global growth, investors have been forced to grapple with potentially explosive market-moving situations such as Greece's debt restructuring, Spain and Italy's vulnerabilities to debt-crisis contagion, the US presidential election and central-bank intervention. Slowing global growth would normally be enough to drive risk assets lower—let alone the additional uncertainty surrounding many of these other events. Yet the exact opposite happened: Credit spreads narrowed and

long-term bond yields fell. Total returns so far this year have been solid for both investment grade and high yield credit, and it is likely that 2012 will be the fourth straight year of positive total returns (see Figure 14).

**STUCK IN THE MIDDLE.** So, what should credit investors expect in 2013? Will it be yet another year of strong returns fueled by prodigious investor inflows and the search for yield, or will interest rates rise suddenly, prompting investors to rush to the exits? We believe credit investors will be stuck somewhere in the middle of these two scenarios, as rates will likely remain range bound throughout the year. Chief Fixed Income Strategist Kevin Flanagan has a target range of 1.2% to 2.0% for the 10-year US Treasury. This is good news for investors with duration exposure, but it also means there's little room for capital gains. Still, the ongoing low interest rate environment and the hunt for yield will be good for both investment grade and high yield credit. In our view, investors will not start taking money out until the credit markets begin generating consistently negative returns. That is unlikely to happen next year.

Both investment grade and high yield credit are trading at spreads that offer the potential for upside, at 146 basis points and 532 basis points, respectively; yet, the yields on both asset classes are near all-time lows. In fact, as recently as mid October, investment grade credit hit a new all-time low of 2.62% and now trades at only 2.66%. On Dec. 11, the high yield market returned to its all-time low in yield of 6.04% and an all-time high in price of 104.8.

Assuming valuations remain roughly the same through the end of the year, investors will have a more difficult starting point for credit investing in 2013 versus previous years (see Figure 15, above, and Figure 16, page 14). Still, we believe that both investment grade and high yield bonds will remain appealing to conservative investors for their extra yield versus US government securities and to aggressive investors for the lower volatility they offer relative to equities.

## Figure 14: Credit Heads Toward a Fourth Straight Year of Positive Returns

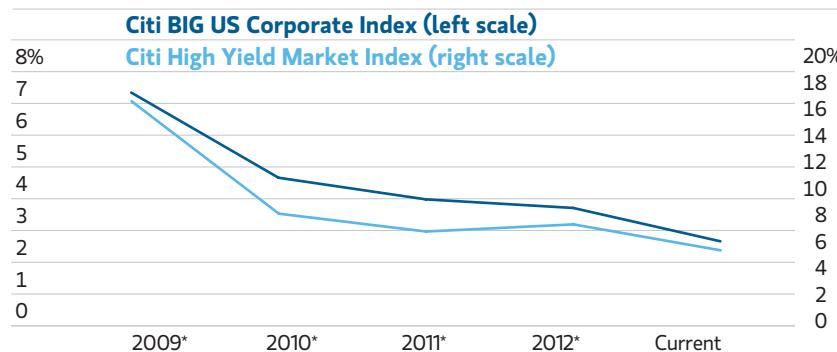
Investment grade and high yield bonds have delivered solid returns in each of the past three years. With just days to go this year, it appears as if 2012 will be the fourth consecutive year with positive results.



Source: The Yield Book as of Dec. 11, 2012

## Figure 15: Low Yields Offer Difficult Starting Point for Credit Investors

Falling bond yields help to drive total returns. Current yields are so low they are unlikely to fall much further. That means most of next year's returns are likely to come from coupons.



\*As of Jan. 1 each year

Source: The Yield Book as of Dec. 11, 2012

**INFLOW OUTLOOK.** Inflows into both asset classes should remain strong, though perhaps not quite as strong as in the past three years. New issuance of corporate debt is likely to decline a little in 2013, in our view, because many companies have likely pulled forward their financing plans amid low rates and uncertainty about the fiscal cliff. We expect buying activity to remain stronger than selling as funds look to invest their cash in the secondary market as new issuance slows. This positive technical backdrop should remain supportive throughout the year. True, corporate fundamentals have started to deteriorate as both earnings and revenues have declined in the

last quarter. However, we believe this deterioration is limited and will not affect corporate access to funding—nor will it have a material effect on the high yield default rate, which is likely to remain near 2% through the end of next year.

**BEST POSITIONS.** We believe positioning within both asset classes will be of utmost importance in 2013. We maintain our preference for a “quality barbell” approach: Focus on lower-quality investment grade bonds because the BBBs offer roughly 80 basis points more in yield than A-rated bonds. We would take the opposite tack in high yield bonds, focusing on BBs and higher-quality Bs. The higher-quality junk bonds limit volatility

while still providing anywhere from 200 to 375 basis points in additional yield. We suggest focusing on three-to-seven-year maturities in investment grade credit, as the yield curve has flattened, and since stretching out further on the curve provides little in the way of yield pickup or duration compensation. Within high yield, we maintain our preference for two-to-five-year maturities as another way to mitigate volatility.

### Winners in 2012, Emerging Market Bonds Still Look Good

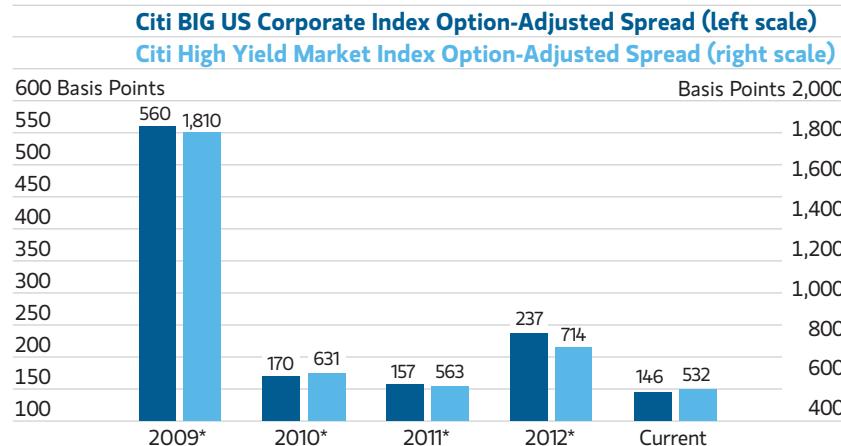
Emerging market (EM) bonds have been among the best-performing asset classes in 2012. The Citi Emerging Markets Sovereign Bond Index has tightened relative to US Treasuries by 134 basis points since the beginning of the year, generating a 17.3% total return (as of Dec. 11). The index is currently trading around 255 basis points higher than Treasuries, with a yield to maturity of 4.0%.

**NEW NORMAL.** Current spreads are near the low end of the trading range they have been in over the past two years, and thus may appear rich—especially considering the yield on the index is near the low of the past two years. However, we believe the yield is more reflective of the norm in this low-yield, fixed income environment. In addition, the spread is in line with a rerating of EM risk, given the vast improvement in both sovereign credit quality and ratings during the past 10 years. Although upside from current levels is somewhat limited given the possibility of rising risk-free rates acting as a headwind, we still like the income potential of EM bonds relative to other fixed income assets. We view any market weakness as an opportunity to add exposure.

**BETTER BALANCES.** Despite slower EM growth, macro fundamentals such as fiscal and trade balances are likely to remain decidedly stronger in EM economies versus their developed-market peers, in our view. We believe this positions EM economies to benefit from an eventual rebound in global growth, which may be driven by coordinated monetary policy easing in both the developed and emerging markets.

### Figure 16: Credit Spreads Leave Little Room for Improvement

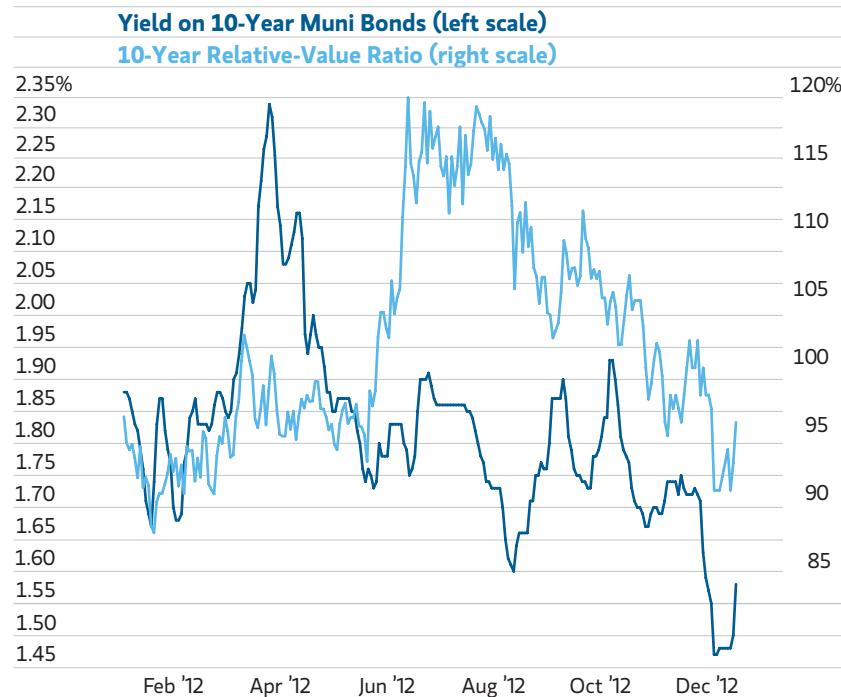
Credit spreads today are roughly the same as they were at the beginning of 2011, yet interest rates are lower. That will make it harder for corporate bonds to earn much more than their coupons in 2013.



\*As of Jan. 1 each year  
Source: The Yield Book as of Dec. 11, 2012

### Figure 17: Muni Yield and Relative-Value Ratio Decline

As yields on municipal bonds have fallen, so has the relative-value ratio. This ratio's descent removes a buffer against possible price declines driven by rising US Treasury yields.



Source: Thomson Reuters as of Dec. 11, 2012

Based on our positive outlook for the long-term growth potential of EM economies and with spread levels that,

in our view, are commensurate with improving credit quality, we recommend an overweight exposure to EM bonds.

## Muni Bonds Stage Impressive Rally

Municipal bonds have enjoyed an impressive price rally that began immediately after Election Day. While much of the momentum was driven by strength in the US Treasury market, the municipal market outperformed Treasuries, bringing the 10-year municipal-to-Treasury relative-value ratio down to levels not seen since the first quarter of the year (see Figure 17, page 14).

What makes the outperformance all the more interesting is that it took place amid concerns that tax negotiations in Washington could result in a change in the federal tax exemption for municipal bonds. President Obama has proposed to limit the value of the municipal tax exemption to 28% for high-income taxpayers. That would tax the muni interest payments at the difference between 28% and the yet unknown applicable marginal rate.

**LOW ABSOLUTE YIELDS.** The muni rally has driven yields down to absolute levels not seen in almost 50 years. Credit spreads have tightened and the municipal yield curve has flattened. All told, it appears that the market is focusing on what is known, versus the seemingly endless possibilities of the unknown, including if or how the fiscal cliff will be resolved, and if that resolution will include a change in the tax exemption for muni bond interest. Among the known positive factors is that bond redemptions usually rise during December and January, and new-issue supply, which is currently robust, typically dwindle sharply as the holiday weeks approach.

Furthermore, weekly inflows for muni bond mutual funds remain strong; indeed, they were negative only twice this year—once during tax season in April and then again during Hurricane Sandy. These substantial inflows help to fuel demand for new issues and the

secondary market as portfolio managers quickly invest the cash.

**NEUTRAL STANCE.** With these factors in the mix, we are neutral at current market levels, acknowledging the power of favorable near-term technicals but mindful that tax-policy risk has not gone away. New bond purchases should be made with careful consideration to interest rate exposure, and credit-quality choices should reflect the anticipated continuation of tepid economic growth in 2013.

Our strategy is to focus on mid-tier, A-rated general-obligation bonds and essential-service revenue bonds with maturities of five to 11 years. We also advise seeking above-market coupons for their defensive qualities as a hedge should rates rise in the years to come. Finally, those who wish to harvest capital gains ahead of a potential hike in the capital-gains rate should consider selling lower-rated bonds and longer duration bonds, especially those with 25-to-30-year maturities. ■

## Global Alternatives/ Absolute Return Investments Outlook

### Commodities Marked Time in November

On balance, commodity prices were effectively unchanged during November based on the Dow Jones-UBS Commodity Total Return Index, our benchmark, and they underperformed most other risk assets. As is typically the case, however, price changes within the index spanned a wide range. At the sector level, the best performer during November was industrial metals, which increased by about 7%; the worst performer was grains, which decreased by more than 3%. Among individual commodities, the best performer was aluminum, up nearly 10%; the worst performer was soybeans, down more than 7%.

We recently added to our commodities allocation as part of a broader effort to increase the exposure to risk assets in our tactical allocations. Broadly speaking, the performance of commodities has significantly trailed that of other risk assets during the past year, against a backdrop of slowing growth in most emerging economies. However, looking forward, growth in emerging economies seems likely to stabilize, if not accelerate, in a lagged response to the policy-easing steps taken by emerging market central banks over the past several months. Indeed, there recently have been some indications that the growth in China's economy has stopped decelerating. Economic activity in emerging economies tends to be more resource intensive than in developed economies, so the nascent pickup in China bodes well for commodity demand.

Hussein Allidina, head of commodity strategy at Morgan Stanley and a member of the Global Investment Committee, continues to rank gold among his top tactical commodity picks. He estimates that the price of gold will reach \$1,875 during 2013—well beyond the current price, which recently slipped below \$1,700. He believes that expansionary monetary policies among the world's major central banks will continue to fuel concerns about future inflation and currency debasement that, in turn, will spur investment demand for gold.

### Hedge Funds Inched Up

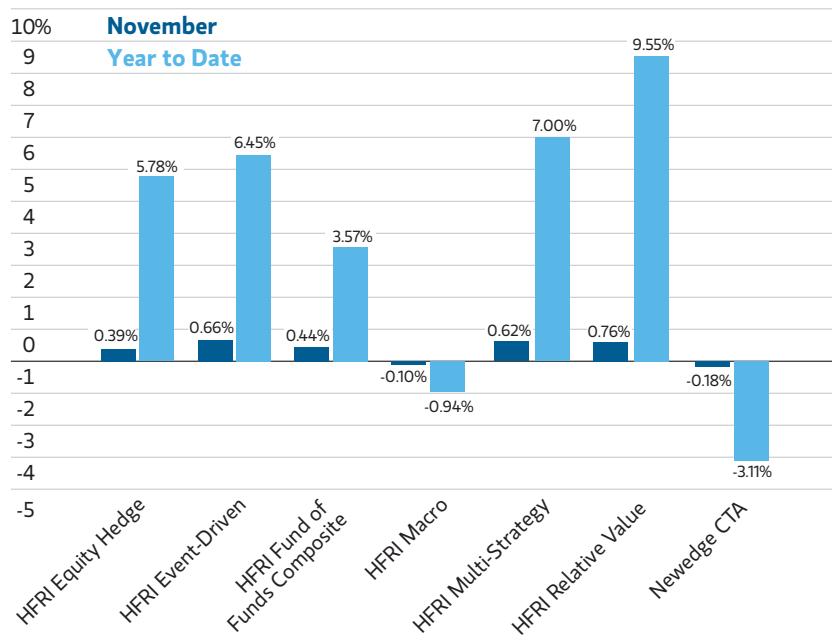
Hedge funds that maintained their exposure to equities through November duly benefited. A postelection 4.1% sell-off reversed intramonth to leave the S&P 500 Index up 0.6%, and the HFRI Fund of Funds Composite Index closed up 0.4% (see Figure 18). Relative-value and event-driven strategies were the top contributors to returns.

**LONG/SHORT EQUITY.** Long/short equity funds delivered positive performance, driven by both net exposure and security selection. Topping the list was an eclectic mix of opportunistic and market-neutral funds, which were able to generate profits in both long and short investments. Utilities had a tough month, with the sector falling almost 5.0%; financials and energy also detracted from performance. Consumer discretionary, up 3.0% for the month, was the top sector. Emerging markets (EM) long/short funds exhibited mixed returns, as Russian and Brazilian equity markets underperformed. Exposure to momentum strategies was beneficial, as price and earnings-momentum factors produced positive results. Value factors, including price/earnings ratio and dividend yield, continued to underperform in the US.

**HIGH YIELD.** The US high yield market was relatively resilient compared with the equity market. The Credit Suisse High Yield Index gained 0.8%, mainly

### Figure 18: Below-Average Total Returns for Hedge Funds So Far This Year

Judging by the HFRI Fund of Funds Composite Index, hedge funds have produced modest returns so far this year. Funds following relative-value strategies have been the best performers for the year to date.



Source: Hedge Fund Research, BarclayHedge as of Dec. 7, 2012

drawing strength from a decline in Treasury yields. Cyclical sectors—such as chemicals, transportation and metals and minerals—led the gains, outperforming defensive sectors. The European high yield market continued to recover, with the Credit Suisse Western European High Yield Index (hedged in euros) rising 1.4%. Distressed funds made gains, returning 0.6%. Areas of strength included residential mortgage-backed securities (RMBS), European financial hybrids, postreorganization equities and distressed credit—all due to idiosyncratic developments. An opportunistic trade in long Greek sovereign debt was also a significant contributor to performance following the tender-offer announcement made by the Greek government in an effort to reduce debt.

**MACRO RETURNS.** Discretionary macro funds generally performed well, with gains stemming from short exposure to the Japanese yen and long exposure to equity indexes. Long positions in European rates, credit and US equities also contributed to performance. Detractors included long exposure to agricultural commodities and precious metals. EM macro funds exhibited strong performance, with long positions in EM fixed income and short positions in the yen leading to profits. In contrast, systematic macro funds delivered

mixed returns, as short-term strategies generally underperformed long-term strategies. The Newedge CTA Index, which tracks commodity trading advisors, declined 0.2%. Short-term momentum strategies experienced losses in equities and commodities, while longer-term strategies benefited from long positions in equities and bonds.

**RELATIVE VALUE.** Relative value had a strong month, thanks largely to mortgage strategies. Cash nonagency RMBS prices across collateral types remained relatively unchanged throughout the month, while the carry added to return. Managers continue to find opportunities to generate extra-returns alpha through security selection and trading. Convertible-bond-arbitrage exposure made a positive contribution to relative value as valuations richened relative to their hedges. In addition, the high yield corporate-credit and leveraged-loan markets provided a slightly positive contribution to performance, as did merger-arbitrage funds.

**INTO THE NEW YEAR.** As hedge funds have rebounded from a difficult second quarter, we see the positive momentum that developed in the second half of the year continuing into the first half of 2013. Perhaps most encouraging is that hedge fund managers appear to be sticking to their management styles rather than chasing macro trends. With correlations

declining and various markets returning to trading on fundamentals, hedge funds have an opportunity to deliver attractive risk-adjusted performance.

With this in mind, we see relative-value funds in general and mortgage funds in particular to be attractive. On the nonagency mortgage side, for example, improved housing fundamentals provide the environment for skilled managers to add value through security selection. On the agency side we see opportunities in taking on prepayment risk, relative to refinancing speeds. In the equity long/short sector, we also see opportunities for disciplined managers who have active trading strategies and are able to temper their exposure to market volatility. In the event-driven sector, we are anticipating a general pickup in merger activity and low default rates in high yield. These two forces suggest a shift from cyclical strategies, such as investing in distressed securities, to more idiosyncratic opportunities, such as merger arbitrage and long/short credit. Finally, we believe a continued allocation to macro strategies will serve investors well in 2013 from both a risk-management and opportunistic perspective. Indeed, until policy action subsides more substantially, we see global macro as a core component of a well designed hedge fund portfolio. ■

# Global Investment Committee Asset Allocation Models

The Global Investment Committee (GIC) is made up of senior professionals from Morgan Stanley LLC Research, Morgan Stanley Smith Barney, Citi Research and outside financial market experts. The committee provides guidance on investment allocation decisions through the creation and maintenance of various model portfolios.

The GIC's Asset Allocation Models shown on the following pages represent its best thinking on strategic and tactical asset allocation. In these portfolios, the strategic equity allocations are in proportion to their share of global market capitalization based on the MSCI All Country World Investable Market Index. As such, the strategic allocation to non-US stocks is more than 50% of the total equity allocation.

There are three sets of models designed to provide guidance for investors with less than \$1 million (Level 1), between \$1 million and \$20 million (Level 2) and more than \$20 million in investable assets (Level 3). Accordingly, the portfolio sets have varying levels of allocations to traditional asset classes, liquid alternative investments and illiquid investments. The GIC constructs each set of portfolios on a scale of increasing risk—that is, expected volatility—and

expected return. Each set consists of eight risk-tolerance levels. In each case, model 1 is the least risky and is composed mostly of bonds. As the model numbers increase, the models introduce higher allocations to equities and thus, become riskier. Alternative/absolute return investments are present in all models and provide increased asset-class diversification.

The GIC has also created and maintains strategic and tactical allocations for several other model portfolios used in various advisory programs. Most of these model portfolios incorporate a home-country bias toward the US. Under this subjective constraint, the strategic equity allocations have a 70%/30% split between US and non-US markets, and the strategic fixed income allocations have an 80%/20% split.

**Global Investment Committee**  
**Asset Allocation Models for Investors**  
**With Less Than \$1 Million in Investable**  
**Assets (Level 1)**

Tactical Changes Effective Nov. 9, 2012

Model Portfolios	Global Bonds		Global Bonds, Global Equities and Alternative/Absolute Return Investments								Global Equities and Alternative/Absolute Return Investments			
	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	Model 8
	Strategic	Tactical	Strategic	Tactical	Strategic	Tactical	Strategic	Tactical	Strategic	Tactical	Strategic	Tactical	Strategic	Tactical
Global Cash	30%	28%	15%	13%	10%	8%	8%	6%	5%	3%	3%	1%	-	-
<b>Global Bonds</b>														
Investment Grade	60	63	55	55	42	42	30	30	21	21	6	6	-	-
Short Duration	15	12	15	12	10	7	7	4	5	2	2	0	-	-
Government/ Government-Related	32	24	28	20	22	16	16	10	11	5	3	0	-	-
Corporate & Securitized	13	27	12	23	10	19	7	16	5	14	1	6	-	-
Inflation-Linked	10	9	3	2	3	2	3	2	3	2	2	1	-	-
High Yield	-	-	2	1	3	2	5	4	6	5	8	7	-	-
Emerging Markets	-	-	-	-	2	3	4	5	5	6	6	7	-	-
<b>Total Bonds</b>	<b>70</b>	<b>72</b>	<b>60</b>	<b>58</b>	<b>50</b>	<b>49</b>	<b>42</b>	<b>41</b>	<b>35</b>	<b>34</b>	<b>22</b>	<b>21</b>	-	-
Total Cash & Short Duration Bonds	45	40	30	25	20	15	15	10	10	5	5	1	-	-
<b>Global Equities</b>														
US Large	-	-	6	11	12	15	16	19	18	22	22	27	30	35
Growth	-	-	3	7	6	9	8	11	9	13	11	16	15	21
Value	-	-	3	4	6	6	8	8	9	9	11	11	15	14
US Mid	-	-	2	2	2	2	2	2	4	4	4	4	6	6
Growth	-	-	1	1	1	1	1	1	2	2	2	2	3	4
Value	-	-	1	1	1	1	1	1	2	2	2	2	3	2
Canada	-	-	1	1	1	1	2	2	2	2	3	3	4	4
Europe	-	-	4	4	8	7	9	8	11	10	14	12	18	16
Europe ex UK	-	-	3	3	5	5	6	6	7	7	9	9	12	12
UK	-	-	1	1	3	2	3	2	4	3	5	3	6	4
Developed Asia	-	-	2	1	5	2	5	2	6	2	8	3	10	3
Japan	-	-	1	0	3	0	3	0	4	0	5	0	6	0
Asia Pacific ex Japan	-	-	1	1	2	2	2	2	2	2	3	3	4	3
US Small	-	-	2	2	2	2	4	4	4	4	4	4	6	6
Growth	-	-	1	1	1	1	2	2	2	2	2	2	3	4
Value	-	-	1	1	1	1	2	2	2	2	2	2	3	2
World ex US Small	-	-	1	1	2	2	2	2	3	3	4	4	5	5
Emerging Markets	-	-	3	3	4	8	5	9	6	10	9	14	11	14
<b>Total Equity</b>	<b>-</b>	<b>-</b>	<b>21</b>	<b>25</b>	<b>36</b>	<b>39</b>	<b>45</b>	<b>48</b>	<b>54</b>	<b>57</b>	<b>68</b>	<b>71</b>	<b>90</b>	<b>89</b>
Total US Equity	-	-	10	15	16	19	22	25	26	30	30	35	42	47
Total Developed ex US Equity	-	-	8	7	16	12	18	14	22	17	29	22	37	28
Total Developed Market Equity	-	-	18	22	32	31	40	39	48	47	59	57	79	75
Total Emerging Market Equity	-	-	3	3	4	8	5	9	6	10	9	14	11	14
<b>Global Alternative/Absolute Return Investments</b>														
REITs	-	-	2	1	2	1	3	2	4	3	4	3	5	5
Commodities	-	-	2	3	2	3	2	3	2	3	3	4	5	6
Managed Futures	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hedge Funds	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Private Real Estate	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Private Equity	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Alternative/ Absolute Return Investments</b>	<b>-</b>	<b>-</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>4</b>	<b>5</b>	<b>5</b>	<b>6</b>	<b>6</b>	<b>7</b>	<b>7</b>	<b>10</b>	<b>11</b>

**Global Investment Committee**  
**Asset Allocation Models for Investors**  
**With \$1 Million to \$20 Million in Investable**  
**Assets (Level 2)**

Tactical Changes Effective Nov. 9, 2012

Model Portfolios	Global Bonds		Global Bonds, Global Equities and Alternative/Absolute Return Investments								Global Equities and Alternative/Absolute Return Investments					
	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7		Model 8	
	Strategic	Tactical	Strategic	Tactical	Strategic	Tactical	Strategic	Tactical	Strategic	Tactical	Strategic	Tactical	Strategic	Tactical	Strategic	Tactical
Global Cash	25%	23%	13%	11%	8%	6%	5%	3%	3%	1%	2%	0%	-	-	-	-
<b>Global Bonds</b>																
Investment Grade	65	68	55	54	40	39	30	29	20	19	6	5	-	-	-	-
Short Duration	15	12	12	9	7	4	5	2	2	0	3	0	-	-	-	-
Government/Government-Related	35	26	30	22	23	15	18	10	13	6	2	0	-	-	-	-
Corporate & Securitized	15	30	13	23	10	20	7	17	5	13	1	5	-	-	-	-
Inflation-Linked	10	9	3	2	3	2	3	2	3	2	2	1	-	-	-	-
High Yield	-	-	2	1	3	2	4	3	5	4	6	5	-	-	-	-
Emerging Markets	-	-	-	-	2	3	3	4	4	5	4	5	-	-	-	-
<b>Total Bonds</b>	<b>75</b>	<b>77</b>	<b>60</b>	<b>57</b>	<b>48</b>	<b>46</b>	<b>40</b>	<b>38</b>	<b>32</b>	<b>30</b>	<b>18</b>	<b>16</b>	-	-	-	-
Total Cash & Short Duration Bonds	40	35	25	20	15	10	10	5	5	1	5	0	-	-	-	-
<b>Global Equities</b>																
US Large	-	-	6	10	10	13	12	16	14	17	20	25	26	30	22	26
Growth	-	-	3	6	5	8	6	10	7	10	10	15	13	18	11	16
Value	-	-	3	4	5	5	6	6	7	7	10	10	13	12	11	10
US Mid	-	-	-	-	2	2	2	2	2	2	4	4	4	4	4	4
Growth	-	-	-	-	1	1	1	1	1	1	2	2	2	2	2	2
Value	-	-	-	-	1	1	1	1	1	1	2	2	2	2	2	2
Canada	-	-	1	1	1	1	1	1	2	2	2	2	3	3	3	3
Europe	-	-	4	4	5	4	7	5	9	8	12	11	15	12	12	10
Europe ex UK	-	-	3	3	3	3	4	4	6	6	8	8	10	10	8	8
UK	-	-	1	1	2	1	3	1	3	2	4	3	5	2	4	2
Developed Asia	-	-	2	1	3	1	4	1	5	2	6	2	8	2	7	2
Japan	-	-	1	0	2	0	3	0	3	0	4	0	5	0	4	0
Asia Pacific ex Japan	-	-	1	1	1	1	1	1	2	2	2	2	3	2	3	2
US Small	-	-	-	-	2	2	2	2	4	4	4	4	6	6	8	8
Growth	-	-	-	-	1	1	1	1	2	2	2	2	3	4	4	5
Value	-	-	-	-	1	1	1	1	2	2	2	2	3	2	4	3
World ex US Small	-	-	1	1	2	1	2	1	2	2	3	2	4	4	5	5
Emerging Markets	-	-	2	3	3	7	5	10	6	10	7	11	9	13	14	16
<b>Total Equity</b>	<b>-</b>	<b>-</b>	<b>16</b>	<b>20</b>	<b>28</b>	<b>31</b>	<b>35</b>	<b>38</b>	<b>44</b>	<b>47</b>	<b>58</b>	<b>61</b>	<b>75</b>	<b>74</b>	<b>75</b>	<b>74</b>
Total US Equity	-	-	6	10	14	17	16	20	20	23	28	33	36	40	34	38
Total Developed ex US Equity	-	-	8	7	11	7	14	8	18	14	23	17	30	21	27	20
Total Developed Market Equity	-	-	14	17	25	24	30	28	38	37	51	50	66	61	61	58
Total Emerging Market Equity	-	-	2	3	3	7	5	10	6	10	7	11	9	13	14	16
<b>Global Alternative/Absolute Return Investments</b>																
REITs	-	-	2	1	2	1	3	2	4	3	4	3	5	5	5	5
Commodities	-	-	2	3	2	3	2	3	2	3	3	4	5	6	5	6
Managed Futures	-	-	2	3	4	5	4	5	4	5	5	6	5	5	5	5
Hedge Funds	-	-	5	5	8	8	11	11	11	11	10	10	10	10	10	10
Private Real Estate	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Private Equity	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total Alternative/Absolute Return Investments</b>	<b>-</b>	<b>-</b>	<b>11</b>	<b>12</b>	<b>16</b>	<b>17</b>	<b>20</b>	<b>21</b>	<b>21</b>	<b>22</b>	<b>22</b>	<b>23</b>	<b>25</b>	<b>26</b>	<b>25</b>	<b>26</b>

**Global Investment Committee**  
**Asset Allocation Models for Investors**  
**With \$20 Million or More in Investable**  
**Assets (Level 3)**

Tactical Changes Effective Nov. 9, 2012

Model Portfolios	Global Bonds		Global Bonds, Global Equities and Alternative/Absolute Return Investments								Global Equities and Alternative/Absolute Return Investments			
	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6		Model 7	Model 8
	Strategic	Tactical	Strategic	Tactical	Strategic	Tactical	Strategic	Tactical	Strategic	Tactical	Strategic	Tactical	Strategic	Tactical
Global Cash	25%	23%	13%	11%	8%	6%	5%	3%	3%	1%	2%	0%	-	-
<b>Global Bonds</b>														
Investment Grade	65	68	55	54	40	39	30	29	20	19	6	5	-	-
Short Duration	10	7	7	4	7	4	5	2	2	0	3	0	-	-
Government/ Government-Related	39	27	34	24	23	15	18	10	13	5	2	0	-	-
Corporate & Securitized	16	34	14	26	10	20	7	17	5	14	1	5	-	-
Inflation-Linked	10	9	3	2	3	2	3	2	3	2	2	1	-	-
High Yield	-	-	2	1	3	2	4	3	5	4	6	5	-	-
Emerging Markets	-	-	-	-	2	3	3	4	4	5	4	5	-	-
<b>Total Bonds</b>	<b>75</b>	<b>77</b>	<b>60</b>	<b>57</b>	<b>48</b>	<b>46</b>	<b>40</b>	<b>38</b>	<b>32</b>	<b>30</b>	<b>18</b>	<b>16</b>	-	-
Total Cash & Short Duration Bonds	35	30	20	15	15	10	10	5	5	1	5	0	-	-
<b>Global Equities</b>														
US Large	-	-	6	10	8	11	12	15	14	17	18	23	24	28
Growth	-	-	3	6	4	7	6	9	7	10	9	14	12	17
Value	-	-	3	4	4	4	6	6	7	7	9	9	12	11
US Mid	-	-	-	-	2	2	2	2	2	2	4	4	4	4
Growth	-	-	-	-	1	1	1	1	1	1	2	2	2	2
Value	-	-	-	-	1	1	1	1	1	1	2	2	2	2
Canada	-	-	1	1	1	1	1	1	2	2	2	2	3	3
Europe	-	-	4	4	6	6	6	6	8	7	11	10	14	12
Europe ex UK	-	-	3	3	4	4	4	4	5	5	7	7	9	9
UK	-	-	1	1	2	2	2	2	3	2	4	3	5	3
Developed Asia	-	-	2	1	3	1	3	1	5	2	6	2	8	3
Japan	-	-	1	0	2	0	2	0	3	0	4	0	5	0
Asia Pacific ex Japan	-	-	1	1	1	1	1	1	2	2	2	2	3	3
US Small	-	-	-	-	2	2	2	2	2	2	4	4	4	6
Growth	-	-	-	-	1	1	1	1	1	1	2	2	2	3
Value	-	-	-	-	1	1	1	1	1	1	2	2	2	3
World ex US Small	-	-	1	1	1	1	2	2	2	2	3	3	4	4
Emerging Markets	-	-	2	3	3	5	4	6	5	9	6	9	9	11
<b>Total Equity</b>	<b>-</b>	<b>-</b>	<b>16</b>	<b>20</b>	<b>26</b>	<b>29</b>	<b>32</b>	<b>35</b>	<b>40</b>	<b>43</b>	<b>54</b>	<b>57</b>	<b>70</b>	<b>69</b>
Total US Equity	-	-	6	10	12	15	16	19	18	21	26	31	32	36
Total Developed ex US Equity	-	-	8	7	11	9	12	10	17	13	22	17	29	22
Total Developed Market Equity	-	-	14	17	23	24	28	29	35	34	48	48	61	58
Total Emerging Market Equity	-	-	2	3	3	5	4	6	5	9	6	9	9	11
<b>Global Alternative/Absolute Return Investments</b>														
REITs	-	-	2	1	2	1	3	2	2	1	2	1	2	2
Commodities	-	-	2	3	2	3	2	3	2	3	3	4	5	6
Managed Futures	-	-	2	3	4	5	4	5	4	5	5	6	5	5
Hedge Funds	-	-	5	5	8	8	11	11	11	11	10	10	10	10
Private Real Estate	-	-	-	-	-	-	-	-	2	2	2	2	3	3
Private Equity	-	-	-	-	2	2	3	3	4	4	4	4	5	5
<b>Total Alternative/Absolute Return Investments</b>	<b>-</b>	<b>-</b>	<b>11</b>	<b>12</b>	<b>18</b>	<b>19</b>	<b>23</b>	<b>24</b>	<b>25</b>	<b>26</b>	<b>26</b>	<b>27</b>	<b>30</b>	<b>31</b>

## Endnotes

1. The strategic allocation refers to the long-term investment weightings for the major asset classes that best fit an investor's specific circumstances, a risk profile including their ability and willingness to tolerate risk, and return objectives, and that take into account the asset returns, standard deviations of returns, and correlations of returns under varying economic and financial conditions.

2. The tactical allocation incorporates active decisions to overweight or to underweight asset classes in the near-term relative to their strategic allocation based on: (i) the current and projected financial and economic environment; (ii) evaluations of risk in global asset markets; and (iii) other fundamental, valuation, and psychological, technical, liquidity factors.

3. The eight portfolios displayed in the accompanying matrix are arranged from left to right in a general progression from conservative through moderate to aggressive risk profiles.

4. A conservative asset allocation risk profile tends to encompass: (i) relatively lower, or in some cases zero, levels of exposure to equities and to investments outside the investor's home country and currency; and (ii)

relatively higher levels of exposure to cash, fixed income, and investments inside the investor's home country and currency. A conservative asset allocation risk profile style may generally be expected to exhibit lower price volatility as measured by the standard deviations of annual returns from the portfolio and generally seeks to generate a somewhat greater proportion of its returns from income as compared with capital gains.

5. A moderate asset allocation risk profile tends to encompass: (i) relatively moderate levels of exposure to equities and to investments outside the investor's home country and currency; and (ii) relatively moderate levels of exposure to cash, to fixed income and investments inside the investor's home country, and to currency. A moderate asset allocation risk profile may generally be expected to exhibit moderate price volatility as measured by the standard deviations of annual returns from the portfolio and generally seeks to generate a somewhat balanced proportion of its returns from income as well as from capital gains.

6. An aggressive asset allocation risk profile tends to encompass: (i) relatively higher levels of exposure to equities and to investments outside the investor's home country and currency; and (ii) relatively lower, or in some cases zero, levels of exposure to cash, to fixed income and investments inside the investor's home country, and to currency. An aggressive asset allocation risk profile may generally be expected to exhibit higher price volatility as measured by the standard deviations of annual returns from the portfolio and generally seeks to generate a somewhat lower proportion of its returns from income as compared with capital gains.

7. The cash/cash equivalent asset class

may include US dollar-based short-term investments as well as non-US dollar-based short-term investments, and/or Exchange-Traded Funds (ETFs) or other instruments dedicated to US and/or to non-US cash and cash equivalents. In a rising US dollar environment, the return to US dollar-based investors from unhedged non-US dollar investments will be lower than US dollar returns. In a falling US dollar environment, the return to US dollar-based investors from unhedged non-US dollar investments will be higher than US dollar returns.

8. Fixed income holdings may be either taxable or tax exempt, depending on the instrument and/or the investor's current and future tax status. As a matter of practice, many investors tend to hold certain types of investments in their taxable accounts, such as: (i) tax-exempt municipal bonds; and (ii) assets that generate a significant proportion of their total return from long-term capital gains. Similarly, many investors tend to hold certain other types of investments in their tax-deferred, tax-exempt, or low-tax accounts, such as: (i) taxable bonds; (ii) assets that generate a significant proportion of their total return in the form of dividends, taxable interest income, accredited income and/or short-term trading profits. It may thus be helpful for investors to mentally and/or computationally combine the assets held in their taxable and their tax-exempt accounts to gain perspective on the overall asset allocation of their investments.

9. Duration is a measure of the average cash-weighted term-to-maturity of a bond. It is a frequently used measure of the sensitivity of a bond's price and the present value of its cash flows relative to interest rate movements. The specific desired duration of investment grade, high yield and emerging markets bond holdings

will usually be influenced by the investor's interest rate expectations. In a rising interest rate environment, investors may choose to generally shorten the duration of their fixed income holdings, and in a falling interest rate environment, investors may choose to generally lengthen the duration of their fixed income holdings.

10. Depending on the interest rate environment and other factors, certain fixed income securities, such as preferred stocks and convertible securities trading near their bond equivalent value, may be included within the fixed income asset category.

11. Global investment grade bonds include: (i) US dollar denominated or non-US dollar denominated US Treasury securities; (ii) US dollar denominated or non-US dollar denominated US Federal Agency and other Government-related securities; (iii) many US dollar denominated or non-US dollar denominated securitized and/or mortgage-backed securities carrying investment grade quality ratings from the major credit rating services; (iv) US dollar denominated or non-US dollar denominated corporate and/or municipal bonds carrying investment grade quality ratings from the major credit rating services; and (v) certain other US dollar denominated or non-US dollar denominated instruments. For tax-related and/or other reasons, some investors may implement their investment grade bond exposure through tax-exempt securities. In periods of deteriorating credit conditions, investors may choose to improve the credit quality of their bond holdings by focusing on higher-rated sectors of the global investment grade bond universe, and in periods of improving credit market conditions, investors may choose to lessen the credit quality of their bond holdings by focusing on a broader range of credit ratings, possibly

including lower-rated issues, within the global investment grade bond universe. Non-US dollar Fixed Income Securities holdings are considered to be hedged into US dollars, unless otherwise noted. In a rising US dollar environment, the return to US dollar-based investors from unhedged non-US dollar investments will be lower than US dollar returns. In a falling US dollar environment, the return to US dollar-based investors from unhedged non-US dollar investments will be higher than US dollar returns.

12. Short duration investment grade bonds are considered here to be fixed income instruments with a Moody's/Standard & Poor's credit quality rating of Baa3/BBB- or higher with duration of two years or less. Duration is a measure of the average cash-weighted term to maturity of a bond and is a frequently used measure of the sensitivity of a bond's price and the present value of its cash flow relative to interest rate movements.

13. Certain equity industry groups and their specific component companies may entail exposure to the forces and factors affecting alternative/absolute return investments, including: (i) real estate and/or energy infrastructure assets, such as pipelines and storage facilities; (ii) commodities (including energy, agriculturals, base metals, and precious metals); and (iii) direct ownership in timber and/or oil and gas properties. Such equity industry groups may be included within the equity asset category.

14. For investors with investable assets greater than \$1 million, the absolute equity weighting, as well as the relative degree of tactical versus strategic equity exposure, may be somewhat lower than total equity weightings for those investors with investable assets of less than \$1 million. This is primarily due to the

greater degree of accessibility that investors with investable assets greater than \$1 million may have to the alternative/absolute return investments asset classes, which tend to be characterized by high investment minimums, possibly lower liquidity, and special capital entry and exit provisions.

15. Currency exposure for the non-US equity and non-US alternative/absolute return investments asset classes is generally not hedged into US dollars unless otherwise noted. In a rising US dollar environment, the return to US dollar-based investors from unhedged non-US dollar investments will be lower than US dollar returns. In a falling US dollar environment, the return to US dollar-based investors from unhedged non-US dollar investments will be higher than US dollar returns.

16. As an alternative to investing in specific non-US countries, investment styles, market capitalization levels and companies, investors with investable assets of less than \$1 million may choose to implement non-US equity asset class exposure through investment vehicles linked to a non-US broad market index. In a rising US dollar environment, the return to US dollar-based investors from unhedged non-US dollar investments will be lower than US dollar returns. In a falling US dollar environment, the return to US dollar-based investors from unhedged non-US dollar investments will be higher than US dollar returns.

17. For some investors, small percentage allocations to certain asset classes may entail inefficient considerations of cost, monitoring and liquidity; in such cases, investors may choose to aggregate these small-percentage allocations with similar asset classes within the same asset category.

18. The alternative/absolute return investments asset category is

considered here to include asset classes that tend to respond to a range of influences in addition to and/or instead of the fundamental underlying forces such as interest rates, economic conditions, and corporate profitability affecting equities, fixed income securities, and cash asset categories. Such influences include: (i) supply-demand considerations for the underlying asset(s); (ii) investor preferences relating to store-of-value considerations; (iii) unconventional investment techniques involving short selling, the borrowing or lending of securities and/or investment capital; (iv) the use of swaps, options, futures and other derivatives; and/or (v) investment manager skill. Within an asset allocation context, alternative/absolute return investments are intended to provide some degree of exposure to returns and standard deviations of returns that tend generally not to be highly correlated with the investment performance of the equity, fixed income and cash asset categories. Due to the fact that many alternative/absolute return investments may have, compared to conventional asset classes: (i) less liquidity; (ii) higher investment vehicle minimums; (iii) unconventional frequency and methodology of pricing; (iv) extended investment timeframes and/or lockup periods; (v) unusual risk/reward profiles; (vi) less predictable timing for capital inflows and outflows; (vii) higher fee structures; (viii) greater or fewer regulatory, tax reporting, and/or compliance requirements; and (ix) more leverage, investors should consider the asset allocations set forth here in light of: (a) their own specific circumstances, risk profile including their ability and willingness to tolerate risk, and return objectives; (b) their short-term and long-term investment outlook; and (c) the universe of investments that are suitable for and appropriate to their

investment temperament and wealth level.

19. Owing to the characteristics of alternative/absolute return investments, many asset classes within this asset category may not be available to investors at all wealth levels. Asset classes that may generally be unavailable to certain investor wealth levels because of minimum investor asset requirements and/or minimum instrument purchase requirements have blank percentage allocation weightings.

20. The global real estate investment trust (REIT) asset class, which tends toward investment exposure to commercial real estate properties (including, but not limited to, office buildings, apartment buildings, hotels and shopping centers), may also include publicly traded companies engaged in the ownership, development and/or management of real estate, and is considered here to exclude an investor's primary residence(s).

21. Real estate investment exposure may be achieved through private equity real estate interests. The private equity real estate asset class may involve special investment considerations, including: (i) investor net asset minimum criteria; (ii) investment vehicle entry and exit conditions; (iii) regulatory, tax reporting and/or compliance requirements; (iv) suitability guidelines; and (v) other risk factors.

22. The commodities asset class is considered here to include precious metals, base metals, agriculturals, energy and/or partnership or direct ownership interests in oil-, gas- and timber-related properties. Commodities exposure may also be implemented through holdings of Equity securities of precious metals-, base metals-, agricultural-, energy- and/or oil-, gas- and timber-related companies.

23. The US Treasury form of inflation-linked securities (known as Treasury

Inflation-Protected Securities, or TIPS) is generally exempt from state and local income taxes. Each semiannual interest payment, including: (i) the coupon; and (ii) the accrued inflation adjustment amount, is subject to federal taxes on ordinary income each year. Ordinary income taxes are due on the inflation adjustments of the principal component of the security, even though the inflation adjustment portion is not realized until maturity or until the security is sold. The taxation of this "phantom income" may cause a misalignment between the investor's tax liabilities and actual cash coupon payments received from the investment.

Morgan Stanley Smith Barney does not offer tax advice for investors. Investors should consult their tax counsel for specific advice regarding tax matters. Investment exposure to US or to non-US inflation-linked securities can be implemented on an individual instrument basis and/or through Exchange-Traded Funds (ETFs) specializing in such assets.

24. The private equity asset class is considered here to include several subcategories, such as: (i) leveraged buyout and management buyout activity; (ii) direct ownership of equity stakes in privately held firms; and (iii) venture capital investing. For the private equity asset class, special investment considerations may include: (i) investor net asset minimum criteria; (ii) investment vehicle entry and exit conditions; (iii) regulatory, tax reporting and/or compliance requirements; (iv) suitability guidelines; and (v) other risk factors that may vary by private equity subcategory.

25. Managed futures funds typically are operated by commodity trading advisors utilizing commodity and financial (equity, interest rate, foreign exchange) futures contracts, forwards, and options. For the managed futures asset class, special investment considerations include: (i) investor net asset minimum criteria; (ii) manager fees; and (iii) regulatory, tax, reporting and/or compliance requirements. Managed futures funds may not be appropriate for all investors. In view of the relatively high standard deviations of returns that may be associated with any single managed futures manager, investors may choose to implement their allocation to managed futures using a fund of funds approach and/or a broadly diversified group of managed futures managers and strategies.

26. For the hedge funds asset class, including funds of hedge funds, special investment considerations include: (i) investor net asset minimum criteria; (ii) investment vehicle entry and exit conditions; (iii) regulatory, tax reporting and/or compliance requirements; (iv) suitability guidelines; and (v) other risk factors that may vary by investor category. Hedge funds may not be suitable for all investors. In view of the potentially high standard deviations of returns that may be associated with any single hedge fund manager, investors may choose to implement their allocation to hedge funds using a fund of funds approach and/or a broadly diversified group of hedge fund managers and strategies. Funds of funds generally have higher fee structures than single hedge fund manager strategies. Certain FX/currency managers that employ a fundamentally driven investment process may be viewed as a subset of the hedge fund (global macro) asset class. Certain FX/currency managers that employ trend-following, quantitatively-driven techniques may be viewed as a subset of the managed futures asset class.

## Index Definitions

**S&P 500 INDEX** Regarded as the best single gauge of the US equities market, this capitalization-weighted index includes a representative sample of 500 leading companies in leading industries of the US economy.

**MSCI ALL COUNTRY WORLD INDEX** This free-float-adjusted, market-capitalization index is designed to measure equity market performance in the developed and emerging markets.

**MSCI EMERGING MARKETS INDEX** This index measures the performance of equities issued by companies domiciled in the emerging markets.

**RUSSELL TOP 200 INDEX** This index measures the performance of the largest-cap segment of the US equity universe. It includes approximately 200 of the largest securities based on market capitalization and represents approximately 68% of the US market.

**RUSSELL 2000 INDEX** This index measures the performance of 2,000 US companies that, when ranked top to bottom by market capitalization, run from numbers 1,001 through 3,000. It accounts for about 10% of total market capitalization.

**RUSSELL 1000 VALUE INDEX** This index measures the performance

of the large-cap value segment of the US equity universe. It includes those Russell 1000 Index companies with lower price-to-book ratios and lower expected growth values.

**RUSSELL 1000 GROWTH INDEX** This index measures the performance of the large-cap growth segment of the US equity universe. It includes those Russell 1000 Index companies with higher price-to-book ratios and higher expected growth values.

**CITI US BROAD INVESTMENT GRADE BOND INDEX** This index represents securities that are investment grade, SEC registered, taxable and dollar denominated.

**CITI US HIGH YIELD MARKET INDEX** This index captures the performance of below-investment-grade debt issued by corporations domiciled in the US. It includes cash-pay and deferred-interest securities. All the bonds are publicly placed, have a fixed coupon and are nonconvertible. Bonds issued under Rule 144A are included in the unregistered form.

**CITI GLOBAL EMERGING MARKET SOVEREIGN BOND INDEX** This index includes Brady bonds and US-dollar-denominated emerging market sovereign debt issued in the global, Yankee and Eurodollar markets,

excluding loans. The ESBI offers diversification benefits with respect to the geographical and asset-class dimensions. It comprises debt in Africa, Asia, Europe and Latin America.

### DOW JONES-UBS COMMODITY TOTAL

**RETURN INDEX** This index calculates the total return on futures contracts for 19 physical commodities. They include energy, industrial metals, precious metals and agricultural commodities.

### HFRI FUND OF FUNDS COMPOSITE INDEX

This is an equal-weighted index of 650 hedge funds with at least \$50 million in assets and 12 months of returns. Returns are reported in US dollars and are net of fees.

### HFRI EQUITY HEDGE INDEX

Equity hedge strategies maintain positions both long and short in primarily equity and equity derivative securities. A wide variety of investment processes can be employed to arrive at an investment decision, including both quantitative and fundamental techniques; strategies can be broadly diversified or narrowly focused on specific sectors and can range broadly in terms of the levels of net exposure, leverage, holding period, concentrations of market capitalizations and valuation ranges of typical portfolios.

### HFRI EVENT DRIVEN INDEX

This is an index of strategies that maintain positions in companies currently or prospectively involved in a wide variety of corporate transactions including but not limited to mergers, restructurings, financial distress, tender offers, shareholder buybacks, debt exchanges, security issuance or other capital structure adjustments.

### HFRI MACRO INDEX

These funds trade a broad range of strategies in which the investment process is predicated on movements in underlying economic variables and the impact these have on

equity, fixed income, hard currency and commodity markets. Managers employ a variety of techniques, both discretionary and systematic analysts and a combination of top-down and bottom-up analyses.

### HFRI MULTI-STRATEGY INDEX

Multistrategy strategies employ components of both discretionary and systematic macro strategies, but neither exclusively. Strategies frequently contain proprietary trading influences, and in some cases contain distinct, identifiable substrategies, such as equity hedge or equity market neutral, or in some cases a number of substrategies are blended together without the capacity for portfolio-level disaggregation.

### HFRI RELATIVE VALUE INDEX

This index tracks managers who maintain positions in which the investment thesis is predicated on realization of a valuation discrepancy in the relationship between multiple securities. Managers employ a variety of fundamental and quantitative techniques to establish investment theses, and security types range broadly across equity, fixed income, derivative or other security types.

### NEWEDGE CTA INDEX

This index calculates the daily rate of return for a pool of commodity trading advisors as selected from the larger managers that are open to new investments.

### CREDIT SUISSE HIGH YIELD INDEX

This index is designed to mirror the investable universe of the US-dollar-denominated high yield debt market. The data frequency is weekly/monthly, the inception was January 1986, and some of the inclusion rules require issues to be publicly registered in the US or issued under Rule 144A with registration rights and a minimum amount outstanding (par value) at \$75 million.

**CREDIT SUISSE WESTERN EUROPEAN HIGH YIELD INDEX** This index is designed to mirror the investable universe of the high yield debt market in Western Europe.

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International investing entails greater risk, as well as greater potential rewards compared to US investing. These risks include political and economic uncertainties of foreign countries as well as the risk of currency fluctuations. These risks are magnified in countries with emerging markets, since these countries may have relatively unstable governments and less established markets and economies.

Alternative investments which may be referenced in this report, including private equity funds, real estate funds, hedge funds, managed futures funds, funds of hedge funds, private equity, and managed futures funds, are speculative and entail significant risks that can include losses due to leveraging or other speculative investment practices, lack of liquidity, volatility of returns, restrictions on transferring interests in a fund, potential lack of diversification, absence and/or delay of information regarding valuations and pricing, complex tax structures and delays in tax reporting, less regulation and higher fees than mutual funds and risks associated with the operations, personnel and processes of the advisor.

Investing in commodities entails significant risks. Commodity prices may be affected by a variety of factors at any time, including but not limited to, (i) changes in supply and demand relationships, (ii) governmental programs and policies, (iii) national and international political and economic events, war and terrorist events, (iv) changes in interest and exchange rates, (v) trading activities in commodities and related contracts, (vi) pestilence, technological change and weather, and (vii) the price volatility of a commodity. In addition, the commodities markets are subject to temporary distortions or other disruptions due to various factors, including lack of liquidity, participation of speculators and government intervention.

Physical precious metals are non-regulated products. Precious metals are speculative investments, which may experience short-term and long term price volatility. The value of precious metals investments may fluctuate and may appreciate or decline, depending on market conditions. If sold in a declining market, the price you receive may be less than your original investment. Unlike bonds and stocks, precious metals do not make interest or dividend payments. Therefore, precious metals may not be suitable for investors who require current income. Precious metals are commodities that should be safely stored, which may impose additional costs on the investor. The Securities Investor Protection Corporation ("SIPC") provides certain protection for customers' cash and securities in the event of a brokerage firm's bankruptcy, other financial difficulties, or if customers' assets are missing. SIPC insurance does not apply to precious metals or other commodities.

Bonds are subject to interest rate risk. When interest rates rise, bond prices fall; generally the longer a bond's maturity, the more sensitive it is to this risk. Bonds may also be subject to call risk, which is the risk that the issuer will redeem the debt at its option, fully or partially, before the scheduled maturity date. The market value of debt instruments may fluctuate, and proceeds from sales prior to maturity may be more or less than the amount originally invested or the maturity value due to changes in market conditions or changes in the credit quality of the issuer. Bonds are subject to the credit risk of the issuer. This is the risk that the issuer might be unable to make interest and/or principal payments on a timely basis. Bonds are also subject to reinvestment risk, which is the risk that principal and/or interest payments from a given investment may be reinvested at a lower interest rate.

Bonds rated below investment grade may have speculative characteristics and present significant risks beyond those of other securities, including greater credit risk and price volatility in the secondary market. Investors should be careful to consider these risks alongside their individual circumstances, objectives and risk tolerance before investing in high-yield bonds. High yield bonds should comprise only a limited portion of a balanced portfolio.

Interest on municipal bonds is generally exempt from federal income tax; however, some bonds may be subject to the alternative minimum tax (AMT). Typically, state tax-exemption applies if securities are issued within one's state of residence and, if applicable, local tax-exemption applies if securities are issued within one's city of residence.

A taxable equivalent yield is only one of many factors that should be considered when making an investment decision. Morgan Stanley Smith Barney and its Financial Advisors do not offer tax advice; investors should consult their tax advisors before making any tax-related investment decisions.

Treasury Inflation Protection Securities' (TIPS) coupon payments and underlying principal are automatically increased to compensate for inflation by tracking the consumer price index (CPI). While the real rate of return is guaranteed, TIPS tend to offer a low return. Because the return of TIPS is linked to inflation, TIPS may significantly underperform versus conventional US Treasuries in times of low inflation.

Equity securities may fluctuate in response to news on companies, industries, market conditions and general economic environment.

Investing in smaller companies involves greater risks not associated with investing in more established companies, such as business risk, significant stock price fluctuations and illiquidity.

Stocks of medium-sized companies entail special risks, such as limited product lines, markets, and financial resources, and greater market volatility than securities of larger, more-established companies.

Asset allocation and diversification do not assure a profit or protect against loss in declining financial markets.

The indices are unmanaged. An investor cannot invest directly in an index. They are shown for illustrative purposes only and do not represent the performance of any specific investment.

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REITs investing risks are similar to those associated with direct investments in real estate: property value fluctuations, lack of liquidity, limited diversification and sensitivity to economic factors such as interest rate changes and market recessions.

Because of their narrow focus, sector investments tend to be more volatile than investments that diversify across many sectors and companies.

Principal is returned on a monthly basis over the life of a mortgage-backed security. Principal prepayment can significantly affect the monthly income stream and the maturity of any type of MBS, including standard MBS, CMOs and Lottery Bonds. Yields and average lives are estimated based on prepayment assumptions and are subject to change based on actual prepayment of the mortgages in the underlying pools. The level of predictability of an MBS/CMO's average life, and its market price, depends on the type of MBS/CMO class purchased and interest rate movements. In general, as interest rates fall, prepayment speeds are likely to increase, thus shortening the MBS/CMO's average life and likely causing its market price to rise. Conversely, as interest rates rise, prepayment speeds are likely to decrease, thus lengthening average life and likely causing the MBS/CMO's market price to fall. Some MBS/CMOs may have "original issue discount" (OID). OID occurs if the MBS/CMO's original issue price is below its stated redemption price at maturity, and results in "imputed interest" that must be reported annually for tax purposes, resulting in a tax liability even though interest was not received. Investors are urged to consult their tax advisors for more information.

Asset-backed securities generally decrease in value as a result of interest rate increases, but may benefit less than other fixed-income securities from declining interest rates, principally because of prepayments.

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