

August 16, 2010

## Morgan Stanley Strategy Forum

**Introduction:** Financial markets reacted negatively to the Fed's more downbeat assessment of the economic outlook last week, and to its announcement to buy Treasury bonds across the curve in order to prevent its balance sheet from shrinking. We saw a sizeable pullback in equities and credit, a drop in 10-year US Treasury yields, a flattening of the curve, and a safe-haven rally in the dollar. Today's Forum begins with my thoughts on the impact of the Fed's recent decisions on asset markets. Andrew Sheets in London then tells us what to do in the credit markets, followed by Jim Caron's thoughts on what the Fed is trying to accomplish. Vishwanath Tirupattur comments on the stepped-up efforts in the US to help home owners with negative equity through the FHA refinance program. Finally, Sivan Mahadevan discusses opportunities in credit and equity derivatives.

— Joachim Fels

### Global Economics

#### Favorable Environment for Asset Markets

Joachim Fels (London) +44 20 7425-6138

**We think the markets overreacted to the Fed's more downbeat assessment** of the US economic outlook.

Yes, the incoming data suggest an even sharper deceleration in growth in 2Q, which we think will be revised down to only 1.3%, but our US team continues to see 3%+ GDP growth in the second half of this year. The economic recovery in the developed countries was always going to be BBB – below par, bumpy, brittle – and we think this is what's playing out. But it's still a recovery, not the beginning of a double-dip recession.

**Triple-A liquidity cycle reinforced.** The Fed's decision to reinvest MBS repayments in Treasuries along the whole yield curve is an important signal that they will do their utmost to prevent deflation. Deflation is the devil central banks don't know, and they are willing to do anything to minimize the deflation risk. By contrast, inflation is the devil they know how to fight and the risk they are willing to

*(continued on next page)*

#### Contributors to this Issue

---

##### Global Economics

Joachim Fels (London) +44 20 7425-6138

##### Europe Credit Strategy

Andrew Sheets (London) +44 20 7677-2905

##### Interest Rate Strategy

Jim Caron (New York) +1 212 761-1905

##### Credit & Equity Derivatives Strategy

Sivan Mahadevan (New York) +1 212 761-1349

##### Securitized Credit Strategy

Vishwanath Tirupattur (New York) +1 212 761-1043

*See appendix for Strategy Forum slide package.*

***In the United States, portions of this report regarding non-US options are intended for Morgan Stanley's Institutional Clients only.***

Morgan Stanley does and seeks to do business with companies covered in Morgan Stanley Research. As a result, investors should be aware that the firm may have a conflict of interest that could affect the objectivity of Morgan Stanley Research. Investors should consider Morgan Stanley Research as only a single factor in making their investment decision.

**For analyst certification and other important disclosures, refer to the Disclosure Section, located at the end of this report.**

+ = Analysts employed by non-U.S. affiliates are not registered with FINRA, may not be associated persons of the member and may not

August 16, 2010  
Strategy Forum

## Global Economics

---

(continued from page 1)

take. As a result, the Fed funds rate will likely stay near zero as far as the eye can see, and additional measures like bond purchases are being used and can be increased if needed. This means the triple-A global liquidity cycle remains firmly in place. We think this mixture of a subdued BBB recovery and plenty of liquidity provides a favourable backdrop for asset markets.

## European Credit Strategy

---

### Opportunities in Credit Default Swaps

Andrew Sheets (London) +44 20 7677-2905

**Fundamentally, we believe the case for credit remains intact.** An environment of corporate caution continues to permeate board rooms. We see a continued theme where corporates tend to avoid aggressive behaviour, given the murky outlook, and this is lowering corporate default risk.

**At the end of the day, credit is a 'benchmark' asset.** We have compared real yields of investment-grade credit vs. government bonds in three markets. Are current total yields attractive in a historical context? No. But are they attractive relative to alternatives, be they government bonds or cash rates? Much more so. If it's a low-growth, low-inflation, low-return world, the extra pickup of credit should become more valuable.

**Good spread, but bad yield and bond price? Sell credit default swaps (CDS) instead.** The average price of a European corporate bond has rarely been higher. And partly a function of the rally in spreads, but mostly as a function of a rally in rates, bonds have an unusually long way to fall if default risk does make a comeback.

**Funding costs should benefit protection-selling over bond-buying.** Obviously, it takes money to buy a bond. For an unleveraged investor, this means forgoing cash equal to the full market value of the purchase. For a leveraged investor (i.e., a bank), it means that funding must be found to support the new bond purchase. CDS, in contrast, require relatively little initial outlay, as the present value of a swap is considered to be close to zero at trade inception — similar to swaps in the interest rate or FX market.

## Interest Rate Strategy

---

### What the Fed Is Trying to Accomplish

Jim Caron (New York) +1 212 761-1905

**The Fed surprised the market last week.** Its plan to buy US Treasuries across the yield curve caught the market by surprise. The intended impact was to reduce interest rates and spur a refinancing wave in mortgages to add stimulus to the economy. The Fed intends to enter the market to buy US Treasuries at pre-determined intervals throughout the month in Open Market Operations. You might recall this from the quantitative easing (QE) days for US Treasuries back in March 2009.

**The stated goal is to maintain the size of the Fed balance sheet** by offsetting the natural run-off of maturing bonds and paydowns from mortgage securities — this offsets a *de facto* tightening. The wild card is the speed at which these mortgages pay down (see the Appendix).

**The Fed action should keep Treasury yields lower.** Based on our deficit projections, we expect around \$100 billion of Treasury issuance per month. So the amount the Fed is buying back in the open market is roughly 30% of the float, based on our assumptions for prepay speeds.

**It is unclear how big and how long this program will be.** Unlike QE in 2009, where the end date and size were pre-announced, this time all we know is that Fed purchases will follow a schedule of paydowns. The absolute extreme is \$1.5 trillion, which represents the entire size of the Fed's mortgage-backed security (MBS) and Agency holdings. This is unlikely, however, as not every mortgage will be refinanced. We estimate approximately \$316 billion over 12 months. Although the Fed will buy Treasuries across the curve, we expect the purchases to be centered on the 7-year point, which offsets the duration of the newly created current coupon mortgage of ~6.5 years.

**Not all rates are created equal.** Consumer mortgage rates may stay sticky at higher levels despite the decline in UST rates. There are technical reasons for this: 1) the sell-off in mortgage bonds (worst sell-off since May 2009 last week) may contribute to keeping rates elevated; 2) there are capacity constraints — it will take mortgage originators a few months to hire enough people to efficiently process the new loans from refinancings.

**This stimulus could fall short of its goal.** Mortgage rates were already historically low prior to the UST purchase announcement. And consumer mortgage rates did not fall

August 16, 2010  
Strategy Forum

after the Fed announced its UST purchase program. For sure, we expect these rates to eventually fall — but by how much? And how long will it take?

**This raises concern over the cost-benefit of this program.**

On one hand, it may marginally lower mortgage rates; on the other hand, the Treasury purchases raise the risk of debt monetization. The marginal benefit of lower interest rates today may come at a much greater expense of higher rates later on. This is another reason why we think the yield curve may remain steep despite popular deflation concerns.

## Securitized Credit Strategy

### Virtues of Forgiveness — Views on the FHA Refinance Program

Vishwanath Tirupattur (New York) (212) 761-1043

**An incentive for currently performing borrowers:** The US Dept. of Housing and Urban Development has provided details on enhancements to its refinance program (first announced in March). The program allows lenders to provide additional refinancing options to borrowers who owe more than their home is worth. The Federal Housing Administration (FHA) will offer certain ‘underwater’ non-FHA borrowers who are current on their existing mortgage, and whose lenders agree to write off at least 10% of the unpaid principal balance of the first mortgage, the opportunity to qualify for a new FHA-insured mortgage starting on Sept. 7, 2010.

**Potential scope:** While as many as 1.5 million borrowers within the non-agency securitized universe satisfy the hard criteria to be eligible for the FHA short refinancing program, there are several considerations that suggest the actual number of borrowers to whom the program will be attractive is likely to be somewhat smaller (but still meaningful). We estimate the number of borrowers who would likely participate at 300,000 to 600,000.

**Impact on the non-agency securitized market:** Even if the scope of the program is towards the lower end of our range, we estimate that about a third of the underwater performing first liens could participate in the program, thus substantially improving collateral performance. Relative to the assumptions built into market prices of senior tranches of non-agency residential mortgage-backed securities (RMBS), particularly Alt-A and subprime, the program has the potential to lower realized loss severities, moving the dial in collateral performance with consequent positive convexity benefits.

**Alignment of servicer incentives:** In our view, the program needs incentives for servicers to compensate for the potential loss of income on performing loans, just as provided by the Home Affordable Modification Program (HAMP). Please see our August 16 *ABS Market Insights* for details.

**Positive on the margin:** This program is not a panacea for all the issues related to housing and mortgage collateral performance, and to be sure, several challenges remain. Still, we view the program as a positive on the margin and supportive of our constructive stance on the senior tranches of non-agency RMBS, particularly subprime and Alt-A collateral.

## Credit & Equity Derivatives Strategy

### Curves Are Steep Across Rates, Credit and Equities

Sivan Mahadevan (New York) +1 212 761-1349

**What’s driving steep curves?** The drivers are both technical and fundamental. In rates, steep curves reflect central bank policy at the front end and a flight to quality. Lower long-end rates reflect growth concerns, but also technicals in the form of strong fund flows into fixed income markets. In risk markets like credit and equity, curves represent the “term premium” that the market demands for taking risk for increasingly long time periods.

**Steep curves are generally bullish, but only when spreads and vol are low.** Steep credit and equity curves are common, especially during bull markets when investors are comfortable with near-term risks and demand a premium for long-term risk. But steep curves with moderately high levels of spreads and volatility are unusual, and that is what we see in credit and equity curves today.

**Why different this time?** In the US there is a healthy debate about growth, including deflation risks, and this raises both credit and equity market uncertainty for both the short and long term.

**Near-term and long-term uncertainty in equities:** In equities, the curve we follow the most closely is the term structure of volatility, which represents the incremental price investors are willing to pay for longer-dated options. The higher the price, the greater the uncertainty. Much like rates, there is a strong technical story in equity options, namely a supply/demand imbalance in the long end of the volatility market. The buyers of volatility/options tend to be hedgers of various sorts, from pensions to insurance. The market lacks significant sellers, partly because some of these sellers of

August 16, 2010  
Strategy Forum

volatility have left the market as changes in the derivative markets made old business models more difficult.

**What's the solution?** The market will eventually develop longer-dated sellers of volatility in the form of better market instruments, structured products, and specialized hedge funds to fill this void. This has already started but will not develop overnight.

#### **How to Position in High-Vol, Steep-Curve Environment?**

**Do not fade the back end yet:** The technical story in the long end of the volatility curve concerns us, so we would not be as aggressive selling volatility there as we were last year. To generate yield, we generally like selling medium-term options in single stocks, either selling calls as overwrites or selling puts to lock in stock purchases at lower levels. We continue to focus on hedging ideas in a relatively high-volatility environment and see a lot of demand here from clients.

**How to hedge in this environment?** (1) Position for moderate tail risk hedges by leaning against steep skew. (2) Hedge in emerging markets where volatility levels remain low because of less exposure to slow-growing developed markets, sovereign risk, bank risk, and regulatory reform. (3) Consider cross-asset hedges to take advantage of high levels of market correlation.

Please see exhibit in Appendix for our key global equity derivative trades.

---

*Portions of this report regarding non-US options are not intended for US clients, other than Institutional Clients. Investing in options is not suitable for all investors. Please see the disclosures at the end of this report and discuss whether this or any particular options strategy is suitable with your Morgan Stanley representative. Please direct all market-specific questions to the coverage analysts and all options-specific questions Sivan Mahadevan, Derivative Research Strategist.*

# Appendix – Morgan Stanley Strategy Forum

August 16, 2010

Andrew Sheets  
European Credit  
Strategy

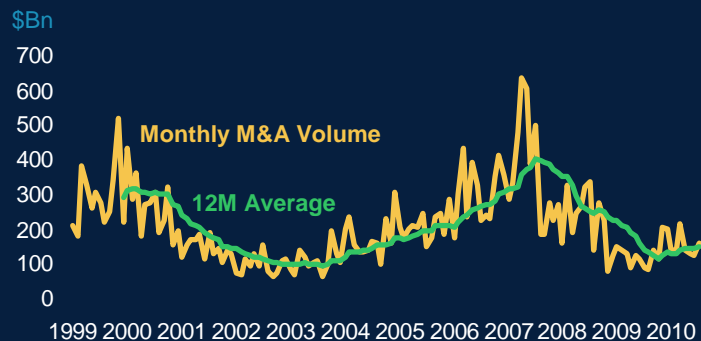
# The Less Conviction Management Has, the Better for Creditors (More Often Than Not)

Capex Spending Y-o-Y (IG and HY Issuers)



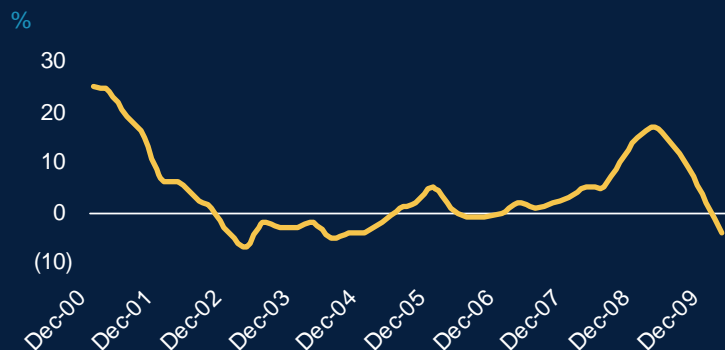
Source: Morgan Stanley Research, Bloomberg, Company Reports

Global M&A Volume



Source: Bloomberg

European IG Company Debt Y-o-Y



Source: Morgan Stanley Research, Bloomberg, Company Reports

European LBO Volume

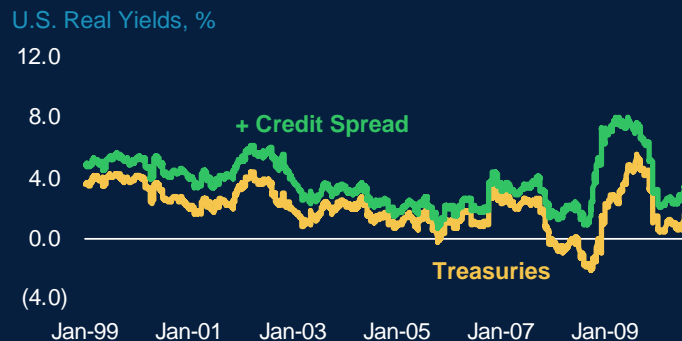


Source: S&P LCD Comps

# Comparing Real Yields of IG Credit vs. Government Bonds in Three Markets

- At the end of the day, Credit is a ‘benchmark’ asset. Are current total yields attractive in a historical context? No. But are they attractive relative to alternatives, be they government bonds or cash rates? Much more so
- If it’s a low-growth, low-inflation, low-return world, the extra pickup of credit should become more valuable. Below and right, we show ‘real yields’ for various markets

## U.S. Credit vs. Treasuries



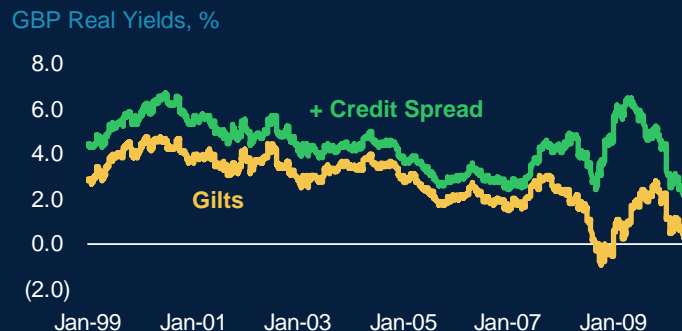
Source: Morgan Stanley Research, Bloomberg

## EUR Credit vs. German Bunds



Source: Morgan Stanley Research, Bloomberg

## GBP Credit vs. Gilts



Source: Morgan Stanley Research, Bloomberg

# Good Spread, But Bad Yield and Bond Price? Sell CDS Instead

## Non-Financial Corporate Bond Prices

Weight Average Bond Price



Source: Morgan Stanley Research, Bloomberg

- The average price of a European corporate bond has rarely been higher. The weighted average price of EUR and GBP non-financials is above \$110. Partly a function of the rally in spreads, but mostly a function of a rally in rates, bonds have an unusually long way to fall if default risk does make a comeback. At right, we show instances of bonds trading rich to CDS, despite a high bond price

## Sell Bond, Sell CDS, Improve Spread and Price

Credit	Maturity	Price	Z-Spread	Matched CDS	Matched Basis
<b>Retail</b>					
CAFP	Apr-20	105.5	71	98	27
AUCHAN	Apr-19	122.3	57	68	11
METFNL	Feb-17	106.5	96	143	47
P RTP	Mar-14	120.4	104	162	58
TSCOLN	Feb-15	112.0	44	94	50
<b>Autos</b>					
BMW	May-15	111.6	56	97	42
VLVY	Feb-14	122.6	144	178	34
VW	Feb-16	121.7	71	121	50
<b>Metals / Mining</b>					
AALLN	Apr-15	113.0	102	203	101
BOUY	Jun-15	116.5	62	90	28
HOLZSW	Mar-14	121.9	96	166	70
MTNA	Jun-16	125.9	222	166	106
TKAGR	Feb-16	118.0	273	369	96
<b>Utilities</b>					
GSZFP	Feb-15	111.9	39	92	53
EDF	Jan-15	112.7	33	79	46
IBESM	Nov-15	122.0	101	182	81
ENEL	Sep-16	106.6	70	187	117
ELEPOR	Jun-15	103.2	114	187	97
<b>Portfolio</b>	<b>Dec-15</b>	<b>115.4</b>	<b>96</b>	<b>145</b>	<b>37</b>

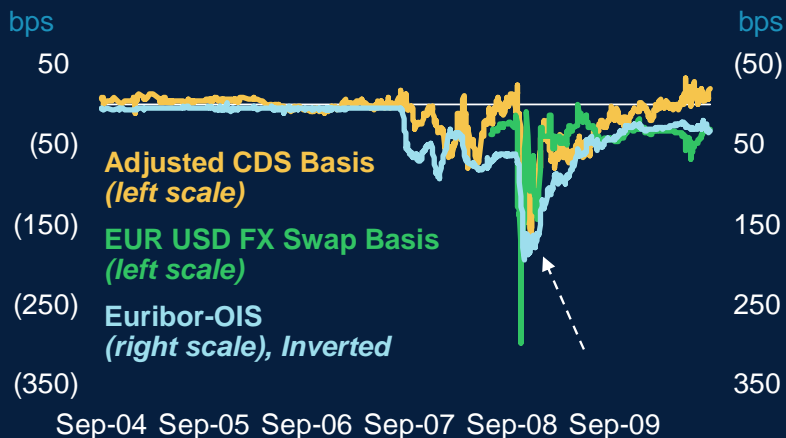
Source: Morgan Stanley Research, Bloomberg

Please note that all important disclosures including personal holdings disclosures and Morgan Stanley disclosures appear on the Morgan Stanley public website at [www.morganstanley.com/researchdisclosures](http://www.morganstanley.com/researchdisclosures).

# Funding Costs Should Benefit Protection Selling Over Bond Buying

- It takes money to buy a bond. An obvious statement, maybe, but one that can affect how the bond is valued. For an unleveraged investor, this means forgoing cash equal to the full market value of the purchase. For a leveraged investor (i.e., a bank), it means that funding must be found to support the new bond purchase. CDS, in contrast, requires relatively initial outlay, as the present value of the swap is considered to be close to zero at trade inception (similar to swaps in the interest rate or FX market)
- The events of 2008 offered a case study of this effect. CDS spreads widened, reflecting the higher credit risk in a significantly stressed world. But corporate bond spreads widened **even more**, as investors began to apply an additional premium (over and above the credit risk) to reflect the fact that they would need to give up valuable liquidity to buy them

## Basis Has Been Correlated to Funding Stresses



Source: Morgan Stanley Research, Bloomberg



© Morgan Stanley

Jim Caron

Interest Rate  
Strategy

## Schedule of MBS and Agency Paydowns

### The Fed to Maintain Its Balance Sheet Size via Buying USTs to Offset Paydowns

All Figures, \$Bn

Date	Paydowns With No Refi Wave*	Paydowns With Refi Wave**	Maturing Agency Bonds***	Total of MBS With Refi Wave + Agencies
Aug-10	11.8	11.8	4.9	16.7
Sep-10	11.8	11.6	0.5	12.1
Oct-10	11.8	15.6	4.4	20.0
Nov-10	11.8	21.5	1.5	23.0
Dec-10	11.8	27.5	0.7	28.2
Jan-11	11.8	33.7	2.8	36.5
Feb-11	11.8	32.0	1.4	33.4
Mar-11	11.8	30.4	10.8	41.2
Apr-11	11.8	25.3	7.4	32.7
May-11	11.8	21.4	6.0	27.4
Jun-11	11.8	20.6	2.4	23.0
Jul-11	11.8	17.2	4.3	21.5
<b>Total</b>	<b>141.6</b>	<b>268.6</b>	<b>47.1</b>	<b>315.7</b>

**Notes:** \* No refi wave implies an estimated steady state paydown of MBS.

\*\* Estimated paydowns given a refi wave concentrated in newer vintage lower coupon mortgages.

\*\*\* The August 2010 figure includes maturing agencies up to September 15.

**Source:** Morgan Stanley, U.S. Federal Reserve Bank

# Fed Replaces MBS and Agencies With US Treasuries

## Securities on Fed Balance Sheet to Be Maintained at \$2.05 Trillion

### NY Fed Treasury Buyback Schedule

Date	Type	Sector
17-Aug-10	T	8/15/2014 – 7/31/2016
19-Aug-10	T	8/15/2016 – 8/15/2020
24-Aug-10	T	2/15/2013 – 7/31/2014
26-Aug-10	T	2/15/2021 – 8/15/2040
30-Aug-10	TIPS	1/15/2011 – 2/15/2040
1-Sep-10	T	2/15/2012 – 1/31/2013
7-Sep-10	T	8/15/2014 – 7/31/2016
9-Sep-10	T	2/15/2013 – 7/31/2014
13-Sep-10	T	8/15/2016 – 8/15/2020

**Fed's Goal:** Maintain the size of their balance sheet by purchasing USTs to counter maturing *assets* (Agencies / MBS) purchased during QE. This sustains a high level of excess reserves on the *liability* side of the Fed's balance sheet.

At an extreme, the size of UST purchases could be as much as \$1.5 trillion (entire holdings of MBS and Agencies), but this is unlikely. At this point, we know the Fed will target the monthly paydowns; Morgan Stanley est. \$316 billion over 12 months.

**The pace and size of UST purchases** are a function of prepayment speeds. The majority of the prepayments are expected to come from newer vintage 4.5% and 5% coupon conventional mortgages. Capacity constraints may keep mortgage rates sticky at higher levels initially.

**Which USTs will the Fed Buy.** The Fed will buy across the coupon curve. But they are likely to concentrate purchases around the 7-year point to offset the duration of the current coupon mortgage which is ~6.5 years.

**Note:** T denotes U.S. Treasury bond; TIPS denote Treasury Inflation Protected Security.

We estimate that there will be close to \$18 billion worth of UST purchases during this period, making each open market operation by the Fed approximately \$2 billion in size.

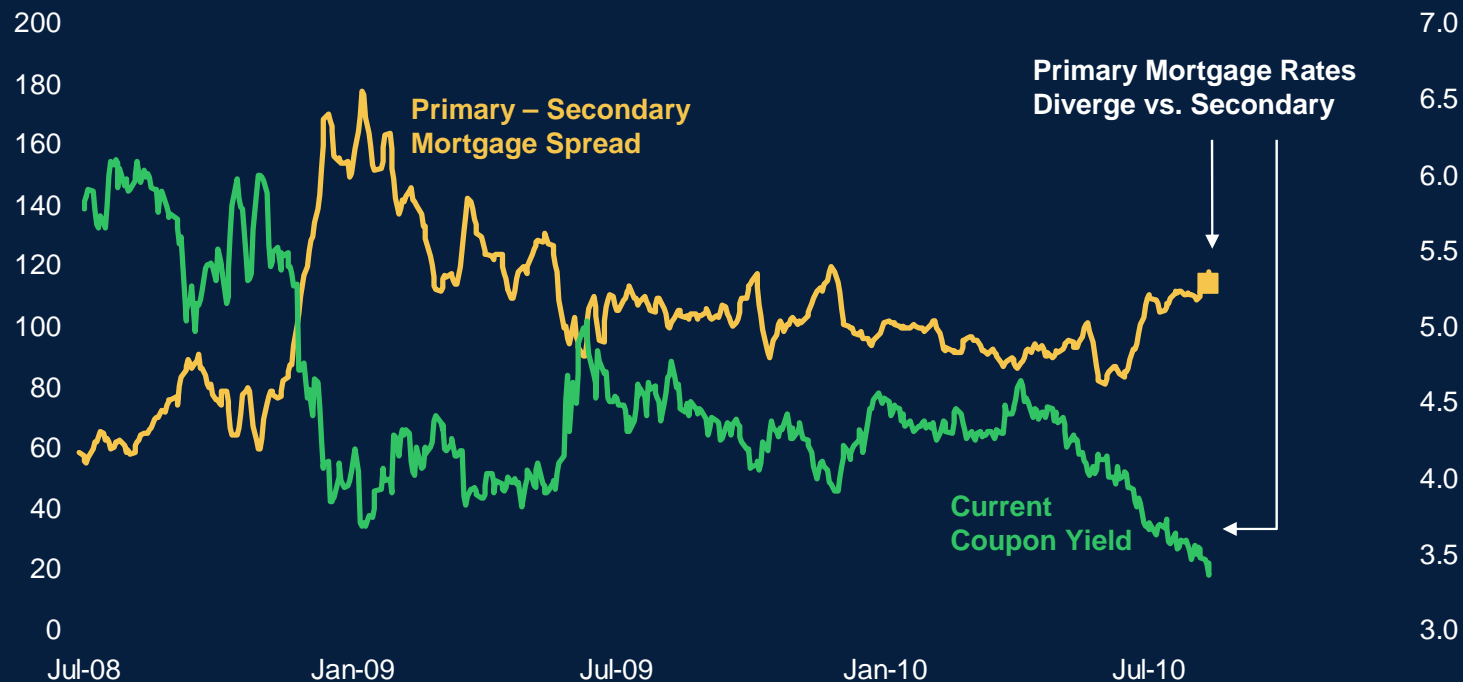
**Source:** Morgan Stanley, Federal Reserve Board

# All Interest Rates Are Not Created Equal

## Consumer Mortgage Rates Remain Sticky at Higher Levels

Primary-Secondary Spread, bps

Current Coupon Yield, %



**def:** Primary Mortgage Rate is the interest rate a consumer pays for a mortgage.  
Secondary Mortgage Rate is the rate the investor receives, also known as the current coupon mortgage.

**Source:** Morgan Stanley, Bloomberg

Vishwanath  
Tirupattur

Securitized Credit  
Strategy

## FHA Refinance Program – Principal Forgiveness for Performing Borrowers

- The Department of Housing and Urban Development and the Treasury recently announced enhancements to the FHA refinance program originally outlined earlier this year. The program allows lenders to provide additional refinancing options to borrowers who owe more than their home is worth. FHA refinancing of loans with a degree of principal forgiveness enables borrowers to transition to a state of positive or close to positive equity in their homes
- To be eligible for this program, a borrower must be currently performing on a mortgage worth more than the market value of their primary residence and have FICO score >500. Lenders must then agree to forgive at least 10% of the balance of this first-lien, leaving the borrower with a new mortgage struck no higher than 97.75% of the price of the house
- While as many as 1.5 million borrowers within the non-agency securitized universe satisfy the hard criteria to be eligible for the FHA refinance program, there are several constraining factors that will limit the program's ultimate scope. We estimate the realistic range of borrowers that could potentially benefit under the program to be between 325,000 and 600,000
- Even if the scope of the program is towards the lower end of our range, we estimate that about a third of the underwater performing first liens could participate in the program, thus substantially improving collateral performance
- Relative to the assumptions built into the market prices of senior tranches of non-agency RMBS, particularly Alt-A and subprime, the program has the potential to significantly lower realized loss severities, moving the dial in collateral performance with consequent positive convexity benefits
- To be effective, the program needs a few tweaks including the addition of servicer incentives to encourage borrower participation

Sivan Mahadevan

Credit & Equity  
Derivatives

# Curves Are Steep Across Rates, Credit and Equities

**What's driving steep curves?** The drivers are both technical as well as fundamental, the message we get is very important.

**Interest rate policy and fund flow:** In rates, steep curves reflect central bank policy at the front-end and a flight to quality. Lower long-end rates represent growth concerns, but also technicals in the form of strong fund flows into fixed income markets.

**Term premium for uncertainty:** In risk markets like credit and equity, curves represent the "term premium" that the market demands for taking risk for increasingly longer time periods.

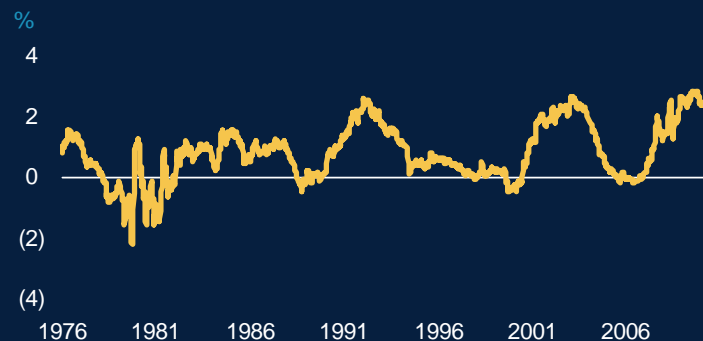
**Steep curves are generally bullish...** Steep credit and equity curves are common, especially during bull markets, when investors are comfortable with near-term risks, and demand a premium for long-term risk to account for cycles.

**... But only when spreads and vol are low:** Steep curves with moderately high levels of spreads and volatility are actually unusual behavior, and we see this in credit and equity curves today.

**Why different this time?** In the U.S., there is a healthy debate about growth today, including deflation risks, and these are factors that raise both credit and equity market uncertainty today and over time.

**Uncertainty all around:** In a sense, today we have both near-term uncertainty and even more long-term uncertainty.

Treasury Yield Curve Is Steep (10Y – 2Y)...



Source: Morgan Stanley Research, Federal Reserve

... As Is the Credit Term Structure (10Y – 5Y)



Source: Morgan Stanley Research, Federal Reserve

# Steep Equity Term Structure Is Fundamental and Technical

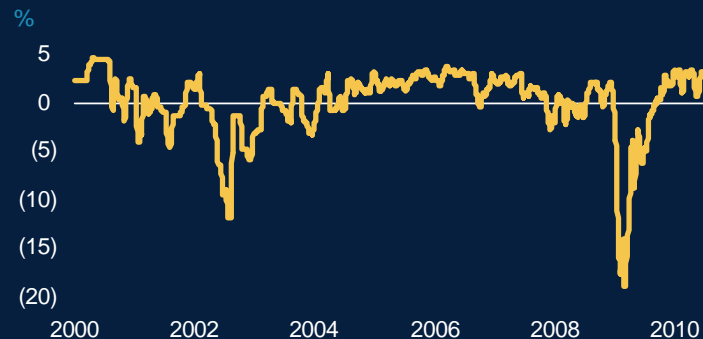
**Near-term and long-term uncertainty:** In equities, the curve we follow the most closely is the term structure of volatility, and it represents the incremental price investors are willing to pay for longer-dated options; the higher the price, the greater the “uncertainty.”

**The technical story:** Much like rates, there is an equally strong technical story in equity options, namely a supply / demand imbalance in the long-end of the volatility market. The buyers of volatility / options tend to be hedgers of various sorts, from pensions to insurance.

**The market lacks significant sellers:** This is partly because some of these sellers of volatility have left the market as derivative market changes have made old business models more difficult.

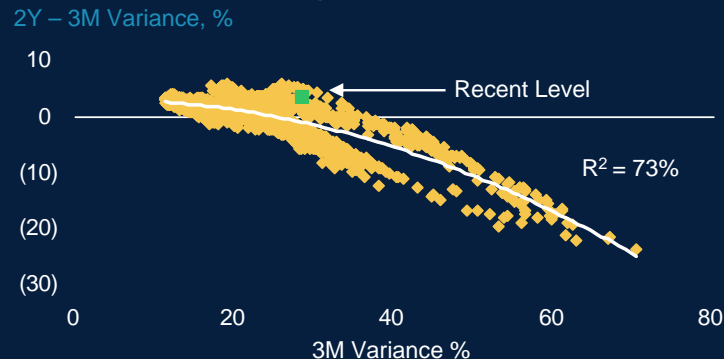
**What’s the solution?** The market will eventually develop longer-dated sellers of volatility in the form of better market instruments, structured products, and specialized hedge funds to fill this void. This has already started, but it will not develop overnight.

**Term Structure (10Y – 3M Variance) Has Steepened...**



**Source:** Morgan Stanley Research, Morgan Stanley Quantitative Derivatives and Strategy

**... And Is Relatively High vs. the Current Vol. Level**



**Source:** Morgan Stanley Research, Morgan Stanley Quantitative Derivatives and Strategy

# How Do We Position in a High Volatility and Steep Curve Environment?

**Do not fade the back end yet:** The technical story in the long-end of the volatility curve concerns us, so we would not be as aggressive selling volatility there as we were last year.

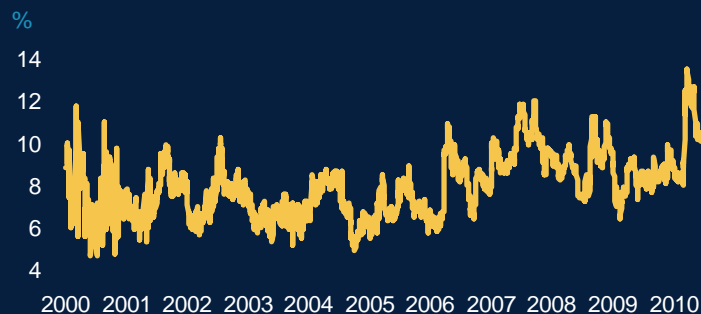
**Generate yield in single stocks:** We in general like selling medium-term options in single-stocks, either selling calls as overwrites or selling puts to lock in stock purchases at lower levels.

**Hedging demand in the market:** We continue to focus on hedging ideas in a relatively high volatility environment, and we see a lot of demand for this from clients.

**How to hedge in this environment?**

- Position for moderate tail risk hedges by leaning against steep skew
- Hedge in EM markets where volatility levels remain very low because of less exposure to DM slow growth, sovereign risk, bank risk, and regulatory reform
- Consider cross-asset hedges to take advantage of high levels of market correlation

## Persistent Downside Concern for DM Equities Is Evidenced by Steep Skew...



Source: Morgan Stanley Research, Morgan Stanley Quantitative Derivatives and Strategy

## ... And EM Volatility at Par With DM Volatility



Source: Morgan Stanley Research, Morgan Stanley Quantitative Derivatives and Strategy

## Our Key Global Equity Derivatives Trades

Region	Trade
<b>U.S.</b>	Buy 3M S&P 500 97.5 / 85% put spreads for 2.9% at a discount of 47% to the put alone
<b>EM</b>	Buy Sep 2010 KOSPI 97.5 / 90% put spreads for 1.5% at a discount of 51% to the put alone  Buy 3M IBOV 97.5 / 85% put spreads for 1.6% at a discount of 62% to the put alone
<b>Cross Asset</b>	Buy 6M ATM S&P 500 put knocking-in at \$1,350 gold for 1.9% at a discount of 75% to vanilla  Buy 6M ATM S&P 500 put knocking-in at \$120 oil for 1.5% at a discount of 80% to vanilla  Buy December 2011 ATM S&P 500 put knocking-in at 10y yields greater than 4.5% for 3.6% at a discount of 75% to vanilla

## Options Disclaimer

Options are not for everyone. Before engaging in the purchasing or writing of options, investors should understand the nature and extent of their rights and obligations and be aware of the risks involved, including the risks pertaining to the business and financial condition of the issuer and the underlying stock. A secondary market may not exist for these securities. For customers of Morgan Stanley & Co. Incorporated who are purchasing or writing exchange-traded options, your attention is called to the publication "Characteristics and Risks of Standardized Options;" in particular, the statement entitled "Risks of Option Writers." That publication, which you should have read and understood prior to investing in options, can be viewed on the Web at the following address: <http://www.optionsclearing.com/about/publications/character-risks.jsp>. Spreading may also entail substantial commissions, because it involves at least twice the number of contracts as a long or short position and because spreads are almost invariably closed out prior to expiration. Potential investors should be advised that the tax treatment applicable to spread transactions should be carefully reviewed prior to entering into any transaction. Also, it should be pointed out that while the investor who engages in spread transactions may be reducing risk, he is also reducing his profit potential. The risk/ reward ratio, hence, is an important consideration.

The risk of exercise in a spread position is the same as that in a short position. Certain investors may be able to anticipate exercise and execute a "rollover" transaction. However, should exercise occur, it would clearly mark the end of the spread position and thereby change the risk/reward ratio. Due to early assignments of the short side of the spread, what appears to be a limited risk spread may have more risk than initially perceived. An investor with a spread position in index options that is assigned an exercise is at risk for any adverse movement in the current level between the time the settlement value is determined on the date when the exercise notice is filed with OCC and the time when such investor sells or exercises the long leg of the spread. Other multiple-option strategies involving cash settled options, including combinations and straddles, present similar risk.

Important Information:

- Examples within are indicative only, please call your local Morgan Stanley Sales representative for current levels.
- By selling an option, the seller receives a premium from the option purchaser, and the purchase receives the right to exercise the option at the strike price. If the option purchaser elects to exercise the option, the option seller is obligated to deliver/purchase the underlying shares to/from the option buyer at the strike price. If the option seller does not own the underlying security while maintaining the short option position (naked), the option seller is exposed to unlimited market risk.
- Spreading may entail substantial commissions, because it involves at least twice the number of contracts as a long or short position and because spreads are almost invariably closed out prior to expiration. Potential investors should carefully review tax treatment applicable to spread transactions prior to entering into any transactions.
- Multi-legged strategies are only effective if all components of a suggested trade are implemented.
- Investors in long option strategies are at risk of losing all of their option premiums. Investors in short option strategies are at risk of unlimited losses.
- There are special risks associated with uncovered option writing which expose the investor to potentially significant loss. Therefore, this type of strategy may not be suitable for all customers approved for options transactions. The potential loss of uncovered call writing is unlimited. The writer of an uncovered call is in an extremely risky position, and may incur large losses if the value of the underlying instrument increases above the exercise price.
- As with writing uncovered calls, the risk of writing uncovered put options is substantial. The writer of an uncovered put option bears a risk of loss if the value of the underlying instrument declines below the exercise price. Such loss could be substantial if there is a significant decline in the value of the underlying instrument.
- Uncovered option writing is thus suitable only for the knowledgeable investor who understands the risks, has the financial capacity and willingness to incur potentially substantial losses, and has sufficient liquid assets to meet applicable margin requirements. In this regard, if the value of the underlying instrument moves against an uncovered writer's options position, the investor's broker may request significant additional margin payments. If an investor does not make such margin payments, the broker may liquidate stock or options positions in the investor's account, with little or no prior notice in accordance with the investor's margin agreement.
- For combination writing, where the investor writes both a put and a call on the same underlying instrument, the potential risk is unlimited.
- If a secondary market in options were to become unavailable, investors could not engage in closing transactions, and an option writer would remain obligated until expiration or assignment.
- The writer of an American-style option is subject to being assigned an exercise at any time after he has written the option until the option expires. By contrast, the writer of a European-style option is subject to exercise assignment only during the exercise period.

## Disclosure Section

The information and opinions in Morgan Stanley Research were prepared or are disseminated by Morgan Stanley & Co. Incorporated and/or Morgan Stanley C.T.V.M. S.A. and/or Morgan Stanley & Co. International plc and/or RMB Morgan Stanley (Proprietary) Limited and/or Morgan Stanley MUFG Securities Co., Ltd. and/or Morgan Stanley Asia Limited and/or Morgan Stanley Asia (Singapore) Pte. (Registration number 199206298Z) and/or Morgan Stanley Asia (Singapore) Securities Pte Ltd (Registration number 200008434H) and/or Morgan Stanley Taiwan Limited and/or Morgan Stanley & Co International plc, Seoul Branch, and/or Morgan Stanley Australia Limited (A.B.N. 67 003 734 576, holder of Australian financial services license No. 233742, which accepts responsibility for its contents), and/or Morgan Stanley Smith Barney Australia Pty Ltd (A.B.N. 19 009 145 555, holder of Australian financial services license No. 240813, which accepts responsibility for its contents), and/or Morgan Stanley India Company Private Limited and their affiliates (collectively, "Morgan Stanley").

For important disclosures, stock price charts and equity rating histories regarding companies that are the subject of this report, please see the Morgan Stanley Research Disclosure Website at [www.morganstanley.com/researchdisclosures](http://www.morganstanley.com/researchdisclosures), or contact your investment representative or Morgan Stanley Research at 1585 Broadway, (Attention: Research Management), New York, NY, 10036 USA.

### Analyst Certification

The following analysts hereby certify that their views about the companies and their securities discussed in this report are accurately expressed and that they have not received and will not receive direct or indirect compensation in exchange for expressing specific recommendations or views in this report: Andrew Sheets, Jim Caron, Vishwanath Tirupattur, Sivan Mahadevan.

Unless otherwise stated, the individuals listed on the cover page of this report are research analysts.

### Global Research Conflict Management Policy

Morgan Stanley Research has been published in accordance with our conflict management policy, which is available at [www.morganstanley.com/institutional/research/conflictpolicies](http://www.morganstanley.com/institutional/research/conflictpolicies).

### Important US Regulatory Disclosures on Subject Companies

The following analyst or strategist (or a household member) owns securities (or related derivatives) in a company that he or she covers or recommends in Morgan Stanley Research: Sivan Mahadevan, SPDR S&P 500 ETF.

The equity research analysts or strategists principally responsible for the preparation of Morgan Stanley Research have received compensation based upon various factors, including quality of research, investor client feedback, stock picking, competitive factors, firm revenues and overall investment banking revenues.

Morgan Stanley and its affiliates do business that relates to companies/instruments covered in Morgan Stanley Research, including market making, providing liquidity and specialized trading, risk arbitrage and other proprietary trading, fund management, commercial banking, extension of credit, investment services and investment banking. Morgan Stanley sells to and buys from customers the securities/instruments of companies covered in Morgan Stanley Research on a principal basis. Morgan Stanley may have a position in the debt of the Company or instruments discussed in this report.

Certain disclosures listed above are also for compliance with applicable regulations in non-US jurisdictions.

### STOCK RATINGS

Morgan Stanley uses a relative rating system using terms such as Overweight, Equal-weight, Not-Rated or Underweight (see definitions below). Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover. Overweight, Equal-weight, Not-Rated and Underweight are not the equivalent of buy, hold and sell. Investors should carefully read the definitions of all ratings used in Morgan Stanley Research. In addition, since Morgan Stanley Research contains more complete information concerning the analyst's views, investors should carefully read Morgan Stanley Research, in its entirety, and not infer the contents from the rating alone. In any case, ratings (or research) should not be used or relied upon as investment advice. An investor's decision to buy or sell a stock should depend on individual circumstances (such as the investor's existing holdings) and other considerations.

### Global Stock Ratings Distribution

(as of July 31, 2010)

For disclosure purposes only (in accordance with NASD and NYSE requirements), we include the category headings of Buy, Hold, and Sell alongside our ratings of Overweight, Equal-weight, Not-Rated and Underweight. Morgan Stanley does not assign ratings of Buy, Hold or Sell to the stocks we cover. Overweight, Equal-weight, Not-Rated and Underweight are not the equivalent of buy, hold, and sell but represent recommended relative weightings (see definitions below). To satisfy regulatory requirements, we correspond Overweight, our most positive stock rating, with a buy recommendation; we correspond Equal-weight and Not-Rated to hold and Underweight to sell recommendations, respectively.

Stock Rating Category	Coverage Universe		Investment Banking Clients (IBC)		
	Count	% of Total	Count	% of Total IBC	% of Rating Category
<b>Overweight/Buy</b>	<b>1095</b>	<b>42%</b>	<b>380</b>	<b>44%</b>	<b>35%</b>
<b>Equal-weight/Hold</b>	<b>1123</b>	<b>43%</b>	<b>388</b>	<b>45%</b>	<b>35%</b>
<b>Not-Rated/Hold</b>	<b>14</b>	<b>1%</b>	<b>4</b>	<b>0%</b>	<b>29%</b>
<b>Underweight/Sell</b>	<b>362</b>	<b>14%</b>	<b>93</b>	<b>11%</b>	<b>26%</b>
<b>Total</b>	<b>2,594</b>		<b>865</b>		

Data include common stock and ADRs currently assigned ratings. An investor's decision to buy or sell a stock should depend on individual circumstances (such as the investor's existing holdings) and other considerations. Investment Banking Clients are companies from whom Morgan Stanley received investment banking compensation in the last 12 months.

### **Analyst Stock Ratings**

**Overweight (O or Over)** - The stock's total return is expected to exceed the total return of the relevant country MSCI Index or the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis over the next 12-18 months.

**Equal-weight (E or Equal)** - The stock's total return is expected to be in line with the total return of the relevant country MSCI Index or the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis over the next 12-18 months.

**Not-Rated (NR)** - Currently the analyst does not have adequate conviction about the stock's total return relative to the relevant country MSCI Index or the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

**Underweight (U or Under)** - The stock's total return is expected to be below the total return of the relevant country MSCI Index or the average total return of the analyst's industry (or industry team's) coverage universe, on a risk-adjusted basis, over the next 12-18 months.

Unless otherwise specified, the time frame for price targets included in Morgan Stanley Research is 12 to 18 months.

### **Analyst Industry Views**

**Attractive (A):** The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be attractive vs. the relevant broad market benchmark, as indicated below.

**In-Line (I):** The analyst expects the performance of his or her industry coverage universe over the next 12-18 months to be in line with the relevant broad market benchmark, as indicated below.

**Cautious (C):** The analyst views the performance of his or her industry coverage universe over the next 12-18 months with caution vs. the relevant broad market benchmark, as indicated below.

Benchmarks for each region are as follows: North America - S&P 500; Latin America - relevant MSCI country index or MSCI Latin America Index; Europe - MSCI Europe; Japan - TOPIX; Asia - relevant MSCI country index.

### **Important Disclosures for Morgan Stanley Smith Barney LLC Customers**

Citi Investment Research & Analysis (CIRA) research reports may be available about the companies or topics that are the subject of Morgan Stanley Research. Ask your Financial Advisor or use Research Center to view any available CIRA research reports in addition to Morgan Stanley research reports.

Important disclosures regarding the relationship between the companies that are the subject of Morgan Stanley Research and Morgan Stanley Smith Barney LLC, Morgan Stanley and Citigroup Global Markets Inc. or any of their affiliates, are available on the Morgan Stanley Smith Barney disclosure website at [www.morganstanleysmithbarney.com/researchdisclosures](http://www.morganstanleysmithbarney.com/researchdisclosures).

For Morgan Stanley and Citigroup Global Markets, Inc. specific disclosures, you may refer to [www.morganstanley.com/researchdisclosures](http://www.morganstanley.com/researchdisclosures) and [https://www.citigroupgeo.com/geopublic/Disclosures/index\\_a.html](https://www.citigroupgeo.com/geopublic/Disclosures/index_a.html).

Each Morgan Stanley Equity Research report is reviewed and approved on behalf of Morgan Stanley Smith Barney LLC. This review and approval is conducted by the same person who reviews the Equity Research report on behalf of Morgan Stanley. This could create a conflict of interest.

### **Other Important Disclosures**

Morgan Stanley & Co. International PLC and its affiliates have a significant financial interest in the debt securities of Lloyds Banking Group.

Morgan Stanley produces an equity research product called a "Tactical Idea." Views contained in a "Tactical Idea" on a particular stock may be contrary to the recommendations or views expressed in research on the same stock. This may be the result of differing time horizons, methodologies, market events, or other factors. For all research available on a particular stock, please contact your sales representative or go to Client Link at [www.morganstanley.com](http://www.morganstanley.com).

Morgan Stanley Research does not provide individually tailored investment advice. Morgan Stanley Research has been prepared without regard to the individual financial circumstances and objectives of persons who receive it. Morgan Stanley recommends that investors independently evaluate particular investments and strategies, and encourages investors to seek the advice of a financial adviser. The appropriateness of a particular investment or strategy will depend on an investor's individual circumstances and objectives. The securities, instruments, or strategies discussed in Morgan Stanley Research may not be suitable for all investors, and certain investors may not be eligible to purchase or participate in some or all of them.

The fixed income research analysts or strategists principally responsible for the preparation of Morgan Stanley Research have received compensation based upon various factors, including quality, accuracy and value of research, firm profitability or revenues (which include fixed income trading and capital markets profitability or revenues), client feedback and competitive factors. Fixed Income Research analysts' or strategists' compensation is not linked to investment banking or capital markets transactions performed by Morgan Stanley or the profitability or revenues of particular trading desks.

Morgan Stanley Research is not an offer to buy or sell or the solicitation of an offer to buy or sell any security/instrument or to participate in any particular trading strategy. The "Important US Regulatory Disclosures on Subject Companies" section in Morgan Stanley Research lists all companies mentioned where Morgan Stanley owns 1% or more of a class of common equity securities of the companies. For all other companies mentioned in Morgan Stanley Research, Morgan Stanley may have an investment of less than 1% in securities/instruments or derivatives of securities/instruments of companies and may trade them in ways different from those discussed in Morgan Stanley Research. Employees of Morgan Stanley not involved in the preparation of Morgan Stanley Research may have investments in securities/instruments or derivatives of securities/instruments of companies mentioned and may trade them in ways different from those discussed in Morgan Stanley Research. Derivatives may be issued by Morgan Stanley or associated persons.

With the exception of information regarding Morgan Stanley, Morgan Stanley Research is based on public information. Morgan Stanley makes every effort to use reliable, comprehensive information, but we make no representation that it is accurate or complete. We have no obligation to tell you when opinions or information in Morgan Stanley Research change apart from when we intend to discontinue equity research coverage of a subject company. Facts and views presented in Morgan Stanley Research have not been reviewed by, and may not reflect information known to, professionals in other Morgan Stanley business areas, including investment banking personnel.

Morgan Stanley Research personnel may participate in company events such as site visits and are generally prohibited from accepting payment by the company of associated expenses unless pre-approved by authorized members of Research management.

The value of and income from your investments may vary because of changes in interest rates, foreign exchange rates, default rates, prepayment rates, securities/instruments prices, market indexes, operational or financial conditions of companies or other factors. There may be time limitations on the exercise of options or other rights in securities/instruments transactions. Past performance is not necessarily a guide to future performance. Estimates of future performance are based on assumptions that may not be realized. If provided, and unless otherwise stated, the closing price on the cover page is that of the primary exchange for the subject company's securities/instruments.

Morgan Stanley may make investment decisions or take proprietary positions that are inconsistent with the recommendations or views in this report.

To our readers in Taiwan: Information on securities/instruments that trade in Taiwan is distributed by Morgan Stanley Taiwan Limited ("MSTL"). Such information is for your reference only. Information on any securities/instruments issued by a company owned by the government of or incorporated in the PRC and listed in on the Stock Exchange of Hong Kong ("SEHK"), namely the H-shares, including the component company stocks of the Stock Exchange of Hong Kong ("SEHK")'s Hang Seng China Enterprise Index; or any securities/instruments issued by a company that is 30% or more directly- or indirectly-owned by the government of or a company incorporated in the PRC and traded on an exchange in Hong Kong or Macau, namely SEHK's Red Chip shares, including the component company of the SEHK's China-affiliated Corp Index is distributed only to Taiwan Securities Investment Trust Enterprises ("SITE"). The reader should independently evaluate the investment risks and is solely responsible for their investment decisions. Morgan Stanley Research may not be distributed to the public media or quoted or used by the public media without the express written consent of Morgan Stanley. Information on securities/instruments that do not trade in Taiwan is for informational purposes only and is not to be construed as a recommendation or a solicitation to trade in such securities/instruments. MSTL may not execute transactions for clients in these securities/instruments.

To our readers in Hong Kong: Information is distributed in Hong Kong by and on behalf of, and is attributable to, Morgan Stanley Asia Limited as part of its regulated activities in Hong Kong. If you have any queries concerning Morgan Stanley Research, please contact our Hong Kong sales representatives.

Certain information in Morgan Stanley Research was sourced by employees of the Shanghai Representative Office of Morgan Stanley Asia Limited for the use of Morgan Stanley Asia Limited.

Morgan Stanley Research is disseminated in Japan by Morgan Stanley MUFG Securities Co., Ltd.; in Hong Kong by Morgan Stanley Asia Limited (which accepts responsibility for its contents); in Singapore by Morgan Stanley Asia (Singapore) Pte. (Registration number 199206298Z) and/or Morgan Stanley Asia (Singapore) Securities Pte Ltd (Registration number 200008434H), regulated by the Monetary Authority of Singapore, which accepts responsibility for its contents; in Australia to "wholesale clients" within the meaning of the Australian Corporations Act by Morgan Stanley Australia Limited A.B.N. 67 003 734 576, holder of Australian financial services license No. 233742, which accepts responsibility for its contents; in Australia to "wholesale clients" and "retail clients" within the meaning of the Australian Corporations Act by Morgan Stanley Smith Barney Australia Pty Ltd (A.B.N. 19 009 145 555, holder of Australian financial services license No. 240813, which accepts responsibility for its contents; in Korea by Morgan Stanley & Co International plc, Seoul Branch; in India by Morgan Stanley India Company Private Limited; in Canada by Morgan Stanley Canada Limited, which has approved of, and has agreed to take responsibility for, the contents of Morgan Stanley Research in Canada; in Germany by Morgan Stanley Bank AG, Frankfurt am Main and Morgan Stanley Private Wealth Management Limited, Niederlassung Deutschland, regulated by Bundesanstalt fuer Finanzdienstleistungsaufsicht (BaFin); in Spain by Morgan Stanley, S.V., S.A., a Morgan Stanley group company, which is supervised by the Spanish Securities Markets Commission (CNMV) and states that Morgan Stanley Research has been written and distributed in accordance with the rules of conduct applicable to financial research as established under Spanish regulations; in the United States by Morgan Stanley & Co. Incorporated, which accepts responsibility for its contents. Morgan Stanley & Co. International plc, authorized and regulated by the Financial Services Authority, disseminates in the UK research that it has prepared, and approves solely for the purposes of section 21 of the Financial Services and Markets Act 2000, research which has been prepared by any of its affiliates. Morgan Stanley Private Wealth Management Limited, authorized and regulated by the Financial Services Authority, also disseminates Morgan Stanley Research in the UK. Private U.K. investors should obtain the advice of their Morgan Stanley & Co. International plc or Morgan Stanley Private Wealth Management representative about the investments concerned. RMB Morgan Stanley (Proprietary) Limited is a member of the JSE Limited and regulated by the Financial Services Board in South Africa. RMB Morgan Stanley (Proprietary) Limited is a joint venture owned equally by Morgan Stanley International Holdings Inc. and RMB Investment Advisory (Proprietary) Limited, which is wholly owned by FirstRand Limited.

The information in Morgan Stanley Research is being communicated by Morgan Stanley & Co. International plc (DIFC Branch), regulated by the Dubai Financial Services Authority (the DFSA), and is directed at Professional Clients only, as defined by the DFSA. The financial products or financial services to which this research relates will only be made available to a customer who we are satisfied meets the regulatory criteria to be a Professional Client.

The information in Morgan Stanley Research is being communicated by Morgan Stanley & Co. International plc (QFC Branch), regulated by the Qatar Financial Centre Regulatory Authority (the QFCRA), and is directed at business customers and market counterparties only and is not intended for Retail Customers as defined by the QFCRA.

As required by the Capital Markets Board of Turkey, investment information, comments and recommendations stated here, are not within the scope of investment advisory activity. Investment advisory service is provided in accordance with a contract of engagement on investment advisory concluded between brokerage houses, portfolio management companies, non-deposit banks and clients. Comments and recommendations stated here rely on the individual opinions of the ones providing these comments and recommendations. These opinions may not fit to your financial status, risk and return preferences. For this reason, to make an investment decision by relying solely to this information stated here may not bring about outcomes that fit your expectations.

The trademarks and service marks contained in Morgan Stanley Research are the property of their respective owners. Third-party data providers make no warranties or representations of any kind relating to the accuracy, completeness, or timeliness of the data they provide and shall not have liability for any damages of any kind relating to such data. The Global Industry Classification Standard ("GICS") was developed by and is the exclusive property of MSCI and S&P.

Morgan Stanley has based its projections, opinions, forecasts and trading strategies regarding the MSCI Country Index Series solely on publicly available information. MSCI has not reviewed, approved or endorsed the projections, opinions, forecasts and trading strategies contained herein. Morgan Stanley has no influence on or control over MSCI's index compilation decisions.

Morgan Stanley Research, or any portion thereof may not be reprinted, sold or redistributed without the written consent of Morgan Stanley.

Morgan Stanley Research is disseminated and available primarily electronically, and, in some cases, in printed form.

**Additional information on recommended securities/instruments is available on request.**

**The Americas**

1585 Broadway  
New York, NY 10036-8293  
United States  
Tel: +1 (1)212 761 4000

**Europe**

20 Bank Street, Canary Wharf  
London E14 4AD  
United Kingdom  
Tel: +44 (0)20 7425 8000

**Japan**

4-20-3 Ebisu, Shibuya-ku  
Tokyo 150-6008  
Japan  
Tel: +81 (0)3 5424 5000

**Asia/Pacific**

International Commerce Center  
1 Austin Road West  
Kowloon, Hong Kong  
Tel: +852 2848 5200