

# Interest Rate Linked Structured Investments

## SUMMARY

Morgan Stanley Structured Investments offer investors a range of investment opportunities with varying features that may provide clients with the building blocks they need to pursue their specific financial goals.

A flexible and evolving segment of the capital markets, structured investments typically combine a debt security with exposure to an individual underlying asset or a basket of underlying assets, such as common stocks, indices, exchange-traded funds, foreign currencies or commodities, or a combination of them. Structured investments are originated and offered by financial institutions and come in a variety of forms, such as certificates of deposit (CDs),<sup>1</sup> units or warrants. Most, however, are senior unsecured notes of the issuer. As a result, an investor will be exposed to the creditworthiness of the issuer for all payments on the notes. Structured investments are not a direct investment in the underlying asset and investors do not have any access to, or security interest in, the reference asset.

Investors can use structured investments to:

- express a market view (bullish, bearish or market neutral)
- complement an investment objective (conservative, moderate or aggressive) or
- gain access or hedge an exposure to a variety of underlying asset classes

In addition to the credit risk of the issuer, investing in structured investments involves risks that are not associated with investments in ordinary fixed or floating rate debt securities. Please read and consider the risk factors set forth under “Selected Risk Considerations” beginning on page 16 of this document as well as the specific risk factors contained in the offering documents for any specific structured investment.

There are many types of structured investments which link to different classes of underlying assets, such as equities, commodities, interest rates and currencies. This document focuses on structured investments linked to reference interest rates, which are referred to as “Interest Rate Linked Structured Investments.”

## TABLE OF CONTENTS

2	Introduction to Interest Rate Linked Structured Investments
4	Implementing Interest Rate Linked Structured Investments in Your Portfolio
4	Enhanced Yield Investments
5	Fixed-to-Floating Rate Notes
5	Range Accrual Notes
7	Curve Accrual Notes
8	Leveraged Curve Notes
10	Interest Rate Hybrid Notes
12	Notes with Automatic Redemption Feature
13	Securities With Payment at Maturity Linked to an Interest Rate
14	Inflation Protection Investments
15	Additional Information and Resources
16	Selected Risk Considerations
20	Important Information

<sup>1</sup> Structured investments can take the form of a CD, which is a bank deposit insured by the Federal Deposit Insurance Corp. (FDIC), an independent agency of the U.S. government. The deposit amount, but not unrealized gains, is insured up to applicable limits. This document, however, mainly discusses structured investments that are debt securities.

**Free Writing Prospectus  
Registration Statement No. 333-178081  
Dated December 7, 2012  
Filed Pursuant To Rule 433**

# Introduction to Interest Rate Linked Structured Investments

**I**nterest rate linked structured investments are an alternative to traditional fixed or floating rate bonds. They provide investors with an opportunity to express a view on a specific benchmark interest rate, with the possibility of earning above-market returns relative to traditional fixed income instruments of comparable maturity and credit quality.

Additionally, they may provide a way to diversify underlying interest rate exposure within a traditional equity and fixed income portfolio.

Interest rate linked structured investments often involve a higher degree of risk than traditional fixed income securities because they are typically long-dated and may not pay interest for substantial periods of time, depending on the performance of the underlying asset. In some cases, they may not provide for the return of all or any principal at maturity.

## **Factors That Drive Interest Rates**

Interest rates are influenced by one or more of the following interrelated factors, among others:

- inflation levels and expectations
- supply and demand of goods and services
- business cycle expectations
- general economic outlook
- Federal Reserve target rate
- governmental policies and programs relating to the financial markets and financial regulations, and

- term premium (the additional rate of return over and above the rate on a short-dated instrument, required to persuade investors to hold instruments with a long period to maturity)

It is important to understand the effects and relative importance of these different factors and how they change and interact over time.

## **Benchmark Interest Rates**

A benchmark interest rate is the lowest rate that investors will accept for a non-U.S. Treasury investment. It is the yield on the most recently issued Treasury security plus a premium. Benchmark rates typically move in tandem with Treasury rates over time. For additional information about benchmark rates, please see the section titled “Additional Information and Resources” on page 15 of this document.

There are several benchmark interest rates and they generally fall into the four categories based on the time to maturity (ultra short-term, short-term, medium-term and long-term) as described below.

## **Understanding Time to Maturity**

Interest rates are typically divided into four categories based on the time to maturity.

### **Ultra Short-Term**

Ultra short-term interest rates include Federal Funds, the London Interbank Offered Rate (LIBOR) and Three-Month Treasury Bill. They are heavily

influenced by Federal Reserve decisions and interbank liquidity. These instruments have terms ranging from overnight to up to one year.

### **Short-Term**

Short-term interest rates encompass bonds and swaps with one to five years to maturity. These rates are generally influenced by Federal Reserve expectations and the short-term economic outlook, as well as supply and demand in the market place.

### **Medium-Term (“Belly of the Curve”)**

Medium-term interest rates include bonds and swaps with five to 10 years to maturity. These rates are generally influenced by the economic outlook for the next business cycle and supply and demand in the bond market.

### **Long-Term**

Long-term interest rates encompass bonds and swaps with greater than 10 years to maturity. This sector of rates is generally influenced by the economic outlook, inflation expectations and supply and demand. An increase in inflation expectations tends to cause long-term rates to increase, as investors desire to be compensated for anticipated decreased purchasing power in the future.

The benchmark interest rates associated with each of these maturity ranges have recently experienced significant volatility compared to their historic levels, as a result of, among

other factors, the financial crisis and the related global debt concerns. You should carefully read and consider the risk factors set forth under “Selected Risk Considerations” beginning on page 16 of this document, as well as the specific risk factors included in the offering documents for any particular investment before you decide to invest.

### Understanding the Yield Curve

The yield curve is a graphic illustration that plots the difference between short-term and long-term bonds of

the same quality. It is one of the tools that economists and investors use to forecast the direction of the economy.

### Types of Yield Curves

Yield curves typically form one of three principal shapes: normal, inverted and flat.

Typically, long-term interest rates are higher than short-term rates because lenders/investors require a greater return to tie up their money over longer time periods. Thus, a normal, or upwardly sloping, yield curve indicates that the economy is growing.

An inverted yield curve is one in which short-term rates exceed long-term rates. Historically considered a leading indicator of a recession, an inverted yield curve normally results when the Federal Reserve raises short-term rates in an attempt to slow the economy. The inverted yield curve’s accuracy as a predictor of a slowdown, however, has diminished in recent years.

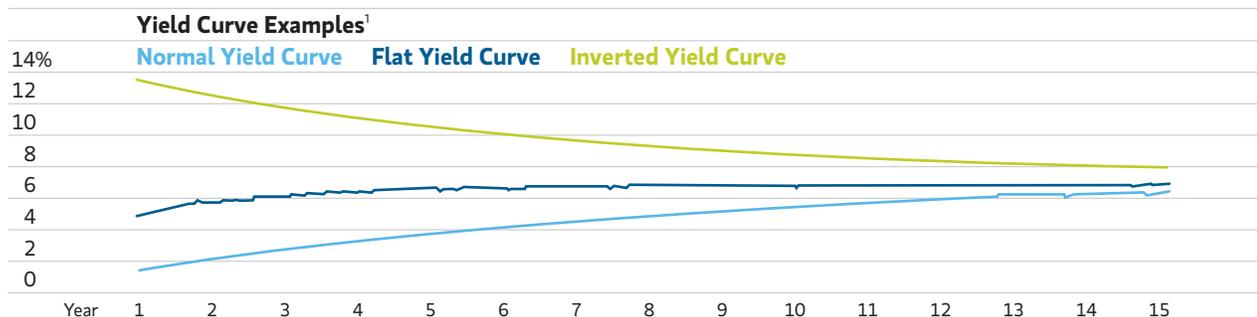
A flat yield curve depicts short- and long-term rates as nearly identical, and it is often interpreted as a sign of uncertainty in the economy.

## The Importance of the Yield Curve

The yield curve is a key statistic used by economists and investors to forecast the direction of the economy. It measures the difference between long-term and short-term interest rates. Typically, long-term interest rates are higher than short-term rates because lenders/investors require a greater return to tie up their money over longer time periods. Thus, a normal, or upwardly sloping, yield curve indicates that the economy is growing.

An inverted yield curve is one in which short-term rates exceed long-term rates. Historically considered a leading indicator of a recession, an inverted yield curve normally results when the Federal Reserve raises short-term rates in an attempt to slow the economy. The inverted yield curve’s accuracy as a predictor of a slowdown, however, has diminished in recent years.

A flat yield curve depicts short- and long-term rates as nearly identical, and it is often interpreted as a sign of uncertainty in the economy.



<sup>1</sup> This chart is for illustrative purposes and is not intended to depict any specific investment

# Implementing Interest Rate Linked Structured Investments in Your Portfolio

**I**nterest rate linked structured investments may be used strategically within a traditional equity and fixed income portfolio to potentially diversify underlying asset exposure, enhance yield and manage overall volatility.

Offerings may be designed to pursue specific investment objectives, such as:

- enhancing yield
- returning principal at maturity (subject to the credit risk of the issuer)
- protecting against inflation and
- diversifying underlying asset exposure

Not all interest rate linked structured investments provide for the return of principal at maturity. You should carefully review the terms of any investment to determine whether they are designed to return principal at maturity.

There are two major categories of interest rate linked structured investments: enhanced yield investments and inflation protection investments.

Many enhanced yield investments pay coupons contingent upon the performance of, or at a floating rate linked to, a specific benchmark rate and may have issuer call or automatic redemption features. These investments may be appropriate for investors who seek to earn a potentially above-market interest rate in exchange for the risk of receiving interest at a variable rate, which could be very low or even zero for potentially very long periods of time.

Investors may also be subject to the risk that the investment may be redeemed (either at the issuer's discretion or upon automatic redemption), for example, when the investments pay an interest rate higher than other comparable investments in the market.

Other types of enhanced yield investments do not make coupon payments. Instead, they provide the potential of an enhanced return at maturity based on the performance of a specified benchmark rate. Some of these offerings are designed to return principal at maturity, while other offerings expose investors to full or partial principal risk. For those types of investments, the investor assumes a higher degree of risk, including the possibility of no return and the potential loss of principal, in exchange for the possibility of receiving at maturity above market returns relative to traditional fixed income instruments of comparable maturity if the investor's view is realized.

Inflation protection investments have coupon payments linked to the rate of inflation. These investments may be appropriate for investors who want to receive returns that will meet or exceed realized inflation, as measured by a benchmark measure of inflation, such as the U.S. Consumer Price Index, while taking the risk of receiving little or no income in periods of low inflation or deflation.

## **ENHANCED YIELD INVESTMENTS**

Enhanced yield investments seek to provide investors with the potential opportunity to receive an above market coupon payment if the underlying interest rate(s) remains constant or moves in the investor's expected direction. These offerings may have a call or automatic redemption feature and if so, have set callable dates or automatic redemption dates. These investments usually return principal at maturity or upon redemption. Any payment at maturity or upon redemption and any interim coupon payments are subject to the issuer's credit risk. There are many types of structured investments that offer potential yield enhancement. Please carefully weigh the risks against the potential benefits before making an investment decision.

To help illustrate potential yield enhancement structured investment offerings, please review the following seven hypothetical examples. Examples 1 through 6 provide coupon payments and payment of principal at maturity, subject to the issuer's credit risk. The coupon payments in examples 1 and 2 are based on the performance of a single interest rate. Examples 3 and 4 illustrate notes with coupon payments linked to the spread between two different interest rates. In example 5, coupon payments are based on the spread between two interest rates as well as

the performance of an equity component. Example 6 illustrates an offering with an automatic redemption feature. Example 7 is different from examples 1 through 6 in that it does not provide coupon payment and exposes investors to partial principal risk at maturity.

#### **EXAMPLE 1: FIXED-TO-FLOATING RATE NOTES LINKED TO A SINGLE UNDERLYING INTEREST RATE**

##### **Summary:**

These notes typically pay coupons at a fixed rate in the beginning of the term and then at a floating rate linked to an underlying interest rate for the remaining term of the notes.

- All coupon payments and the payment at maturity are subject to the issuer's credit risk
- Investors are subject to the risk of receiving no coupon payments or coupon payments at the minimum interest rate throughout the entire floating interest rate period, depending on the specific terms of the notes.
- Common underlying interest rates include 3-month or 6-month USD LIBOR, constant maturity swap rates (with various maturities) and constant maturity U.S. Treasury rates (with various maturities).
- There is no appreciation potential beyond the coupon payments.
- Interest payments during the floating interest rate period can be subject to

a maximum interest rate, a minimum interest rate or both a minimum and a maximum interest rate.

- The notes may or may not be subject to issuer discretionary call or automatic early redemption.
- If the notes are redeemed prior to maturity pursuant to the terms of a specific offering, investors will receive no further coupon payments and may have to reinvest proceeds in a lower rate environment.

##### **Hypothetical Terms: 5-year Fixed-to-Floating Rate Notes linked to 3-month USD LIBOR**

These fixed-to-floating rate notes pay an initial fixed rate of 5% during the first year of the notes. From year two to maturity, the notes will pay a floating rate linked to 3-Month USD LIBOR plus a spread, subject to a maximum interest rate and a minimum interest rate.

##### **Summary of Hypothetical Terms:**

- Term: five years
- Interest:
  - First year: 5% fixed per annum;
  - Years two to maturity (the floating interest rate period): 3-month USD LIBOR + 2%, subject to a maximum interest rate of 6% per annum and a minimum interest rate of 2.5% per annum
- Interest payment period: quarterly
- Payment at maturity: par plus any accrued and unpaid interest, if any
- Not callable

**Key Investment Rationale:** The notes offer an above market rate coupon for the first year and thereafter offer a floating interest rate exposure, subject to a maximum interest rate and a minimum interest rate (i.e., a “collar”). Those notes are similar to plain vanilla corporate bonds, but are typically considered as structured investments where there is a cap or a collar on the interest rate. The income associated with this type of offering is variable during the floating interest rate period. The floating interest rate of LIBOR plus a spread of 2% (subject to a cap of 6%) could potentially be less than current market rates for taking the credit risk of the issuer. This type of offering allows an investor to express a view that the underlying interest rates will rise moderately, while retaining the certainty of a minimum interest rate.

#### **EXAMPLE 2: RANGE ACCRUAL NOTES LINKED TO A SINGLE UNDERLYING INTEREST RATE**

##### **Summary:**

These notes typically accrue interest at a fixed annual rate but only during the periods when the underlying interest rate is within a specified range.

- All coupon payments and the payment at maturity or upon early redemption are subject to the issuer's credit risk.
- If the underlying interest rate is outside the specified range, no interest will

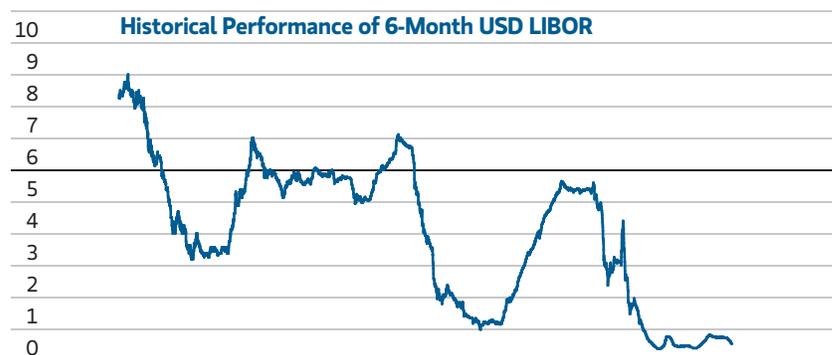
## Example 2: Hypothetical Payout Table

The table below presents examples of hypothetical interest rates at which interest would accrue on the notes during any quarter based on the total number of calendar days in a quarterly interest payment period on which the 6-month USD LIBOR is within the specified range. The table assumes that the interest payment period contains 90 calendar days and an annual rate of 6%.

Number of days 6-Month USD LIBOR within the range	Interest Rate (per annum)
0	0.0000%
10	0.6667
15	1.0000
30	2.0000
50	3.3333
60	4.0000
90	6.0000

## Example 2: Historical Information

The following graph sets forth the historical performance of 6-month USD LIBOR for the period from January 1, 1990 through November 1, 2012. The historical levels of the 6-month USD LIBOR should not be taken as an indication of future performance.



Source: Bloomberg L.P., as of Nov. 1, 2012

accrue for the related period. Investors may not receive coupon payments for substantial time periods, or may not receive any coupon payments throughout the entire term of the notes (or the entire floating interest rate period, if the notes pay a fixed interest rate in the beginning).

- They are typically long-term investments (subject to issuer discretionary call or automatic redemption, if applicable).
- The notes provide an opportunity to receive an above market coupon if the notes are not previously called and the underlying interest rate is within the specified range.
- Common underlying interest rates include 3-month or 6-month USD LIBOR, constant maturity swap rates (with various maturities) and constant maturity U.S. Treasury rates (with various maturities)
- There is no appreciation potential beyond the coupon payments; the aggregate coupon payments and the total return are capped by the annual rate.
- The notes may or may not be subject to issuer discretionary call or automatic redemption.
- If the notes are redeemed prior to maturity pursuant to the terms of a specific offering, investors will receive no further coupon payments and may have to reinvest proceeds in a lower rate environment.

**Hypothetical Terms: 10-Year Callable Range Accrual Notes Based on 6-Month USD LIBOR (callable after three years)**

These range accrual notes pay interest

at an annual rate of 6% but only for days when the 6-month USD LIBOR is between zero and 6%. Starting from the beginning of the fourth year, the issuer can redeem the notes at its discretion on quarterly call dates.

**Summary of Hypothetical Terms:**

- Term: 10 years
- Interest: 6% per annum for each day that 6-month USD LIBOR is greater than or equal to zero and less than or equal to 6%
- If 6-month LIBOR is outside of the range on any day, the notes will not accrue interest for that day.
- Interest payment period: quarterly
- Payment at maturity/upon early redemption: par plus any accrued and unpaid interest, if any
- Early redemption: callable by the issuer after three years on any quarterly redemption date

**Key Investment Rationale:** The accrual feature means that interest accrues on the notes only for days that the underlying interest rate is within the predefined range. If the underlying interest rate is outside the range for a given day, then the investor will not receive interest for that day. Therefore, the income associated with this type of offering is variable and can be zero. These notes allow investors to take a view that short-term rates will be range bound for the next 10 years and to potentially receive an above market interest rate in exchange for assuming the risk of variable or no income, and the risk that the issuer can call the notes prior to maturity.

**EXAMPLE 3: CURVE ACCRUAL NOTES Summary:**

These notes typically accrue interest at a fixed annual rate but only during the periods when the underlying interest rate curve is within a specified range.

- All payments are subject to the issuer’s credit risk.
- If the underlying interest rate curve is outside the specified range, no interest will accrue for the related period. Investor may not receive coupon payments for substantial periods of time, or may not receive any coupon payments throughout the entire floating interest rate period.
- They are typically long-term investments (subject to issuer discretionary call or automatic redemption, if applicable).
- The notes provide an opportunity to receive an above-market coupon if the

notes are not called and the underlying interest rate curve remains upward sloped.

- Common underlying interest rate curves include CMS Curve: (30 CMS – 10 CMS), (30 CMS – 2 CMS) and (10 CMS – 2 CMS); Constant Maturity Treasury (CMT) Curve: (10 CMT – 2CMT).
- There is no appreciation potential beyond the coupon payments; the aggregate coupon payments and the total return are capped by the annual rate.
- The notes may or may not be subject to issuer discretionary call or automatic redemption.
- If the notes are redeemed prior to maturity pursuant to the terms of a specific offering, investors will receive no further coupon payments and may have to reinvest proceeds in a lower rate environment, and may not be able to

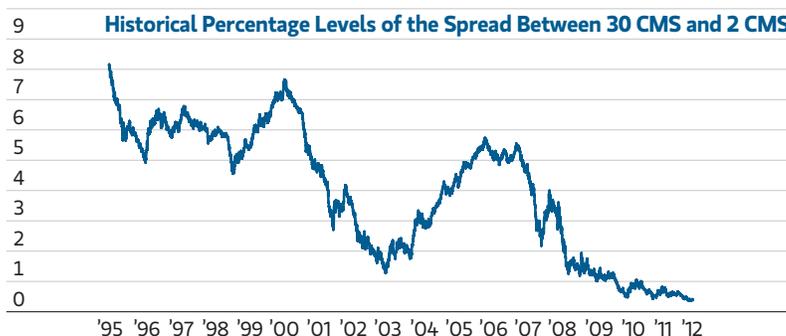
**Example 3: Hypothetical Payout Table**

The table below presents examples of hypothetical interest rates at which interest would accrue on the notes during any monthly interest payment period in the floating interest rate period based on the total number of calendar days in such monthly interest payment period on which the CMS spread (30CMS minus 2CMS) is greater than or equal to zero. The table assumes that each interest payment period contains 30 calendar days and an annual rate of 8%.

Number of days CMS spread ≥ zero	Interest Rate (per annum)
0	0.0000%
5	1.3333
10	2.6667
15	4.0000
20	5.3333
25	6.6667
30	8.0000

### Example 3: Historical Information

The following graph sets forth the historical percentage levels of the spread between 30 CMS and 2 CMS for the period from January 1, 1995 to Nov. 1, 2012. The historical levels of the spread between 30 CMS and 2 CMS should not be taken as an indication of their future performance.



Source: Bloomberg L.P., as of Nov. 1, 2012

reinvest at comparable terms or returns.

**Hypothetical Terms: 10-Year Curve Accrual Notes Based on the Spread between the 30-Year Constant Maturity Swap Rate (30 CMS) and the 2-Year Constant Maturity Swap Rate (2 CMS) (Callable after one Year)**

These curve accrual notes pay interest at 8% per annum in the first year. For years two through 10, interest will accrue at 8% per annum for each day during any interest payment period on which the 30 CMS is greater than or equal to the 2 CMS. Starting the second year, the issuer can redeem the notes at its discretion on any quarterly redemption date.

**Summary of Hypothetical Terms:**

- Term: 10 years
- Interest:

- First year: 8% per annum;
- Years two to maturity (floating interest rate period): 8% per annum for each day that the CMS spread (30CMS minus 2CMS) is greater than or equal to zero. Therefore, if on any day during this period the spread is negative, no interest will accrue for that day
- Interest payment period: monthly
- Payment at maturity/upon early redemption: par plus accrued and unpaid interest, if any
- Early redemption: callable by the issuer after one year on any quarterly redemption date

**Key Investment Rationale.** This strategy allows an investor to express a view that longer term rates will remain

higher than shorter term rates during the 10-year term of the notes (normal yield curve). In exchange for assuming the risk of variable or no income during years two through 10 of the term of the notes, and the risk that the issuer calls the notes prior to maturity, investors receive an above-market rate for the first year and after that potentially receive a higher yield than would otherwise be available with fixed rate bonds of similar credit quality and/or maturity.

**EXAMPLE 4: LEVERAGED CURVE LINKED NOTES**

**Summary:**

These notes typically pay interest at a variable rate equal to the underlying interest rate spread, as determined periodically (e.g. monthly or quarterly), times a leverage factor.

- All payments are subject to the issuer’s credit risk.
- If the underlying interest rate curve is flat or inverted, no interest will accrue for the related period. Therefore, an investor may not receive coupon payments for substantial periods of time, or may not receive any coupon payments throughout the entire floating interest rate period.
- They are typically long-term investments (subject to issuer discretionary call or automatic redemption, if applicable).
- The typical leverage factor is between two and five times.
- The notes provide an opportunity to receive an above-market coupon if the longer term rates remain significantly higher than shorter term rates.

- Common underlying interest rate curves include Constant Maturity Swap Curve: (30 CMS – 10 CMS), (30 CMS – 2 CMS) and (10 CMS – 2 CMS); Constant Maturity Treasury Curve (10 CMT – 2 CMT).
- There is no appreciation potential beyond the coupon payments; the aggregate coupon payments and the total return are capped by the maximum interest rate.
- The notes may or may not be subject to issuer discretionary call or automatic redemption.
- If the notes are redeemed prior to maturity pursuant to the terms of a specific offering, investors will receive no further coupon payments and may have to reinvest proceeds in a lower rate environment.

**Hypothetical Terms: 15-Year Leveraged Curve Notes Based on the Spread Between 30 CMS and 2 CMS (Callable after two years)**

These leveraged curve accrual notes pay interest at 10% per annum in the first two years. Between years three and 15, interest will accrue at a variable rate per annum equal to four times the positive difference, if any, between the 30 CMS and the 2 CMS, as determined on the quarterly determination date prior to the related quarterly interest payment period, subject to the maximum interest rate of 12% per annum and minimum interest rate of zero per annum for each floating interest payment period. Starting from the beginning of the third year, the issuer can redeem the notes at its discretion on quarterly call dates.

**Summary of Hypothetical Terms**

Term: 15 years

- Interest: Years one and two, 10% per annum
  - Years three to maturity (floating interest rate period): leverage factor × (30CMS – 2CMS), subject to a maximum interest rate of 12% per annum and a minimum interest rate of zero.
  - The 30CMS and 2CMS for each floating interest payment period will be determined on the determination date prior to the related quarterly interest payment period.
- If the spread between 30 CMS and 2 CMS on any determination date is zero or negative, no interest will be paid for the related quarterly interest payment period.

**Example 4: Hypothetical Payout Table**

The table below presents examples of hypothetical interest rates that would accrue on the notes during any quarter in the floating interest rate period based on the CMS spread (30 CMS – 2 CMS) on the applicable determination date, if the notes have not been previously called.

30CMS – 2CMS	Interest Rate (per annum)
-2.000	0.0000%
-1.500	0.0000
-1.000	0.0000
0.00	0.0000
0.500	2.000
1.000	4.000
1.500	6.000
2.000	8.000
2.500	10.000
3.000	12.000
3.500	12.000
4.000	12.000
4.500	12.000

Assuming a leverage factor of 4, investors will receive the maximum interest rate of 12% per annum for an interest payment period when the spreads between 30 CMS and 2 CMS is equal to or greater than 3% on the relevant determination date.

- Leverage factor: four
- Interest payment period: quarterly
- Early redemption: callable by the issuer after two years on any quarterly redemption date
- Payment at maturity/upon early redemption: par plus accrued and unpaid interest, if any

**Key Investment Rationale:** This strategy allows an investor to express a view that longer term rates will remain significantly higher than shorter term rates during the 15-year term of the notes. In exchange for assuming the risk of variable or no income, investors potentially receive a higher yield than would otherwise be available with fixed rate bonds of similar credit quality and/or maturity.

**Historical Information:** See Example 3, beginning on page 7.

#### **EXAMPLE 5: INTEREST RATE HYBRID NOTES**

##### **Summary:**

*These notes typically pay interest both linked to an underlying interest rate/interest rate curve and contingent upon the performance of an underlier of another asset class.*

- All payments are subject to the issuer's credit risk.
- If either the underlying interest rate curve is flat or inverted (or the underlying single interest rate is outside the specified range, as applicable), or the non-interest rate underlying asset closes below the specified level, no interest will accrue for the related period. Therefore, an investor may not receive coupon payments for

substantial periods of time or may not receive any coupon payments during the entire floating interest rate period.

- They are typically long-term investments (subject to issuer discretionary call or automatic redemption, if applicable).
- The link to both interest rates and another asset class increases the likelihood of reduced or no interest, as compared to non-hybrid investments.
- There is an opportunity to receive an above market coupon if the reference curve or the reference rate remains high and the level of the other underlying asset does not decrease substantially during the term of the notes.
- Common underlying interest rates include Constant Maturity Swap Curve (30 CMS – 10 CMS, 30 CMS – 2 CMS, 10 CMS – 2 CMS); Constant Maturity Treasury Curve (10 CMT – 2 CMT); single interest rates (LIBOR, CMS and CMT); and the Consumer Price Index (CPI), an inflation index.
- Common non-interest rate underlying assets include the S&P 500® Index and the Russell 2000® Index.
- The level at or above which the non-interest rate underlying asset must close on a day for interest to accrue that day is generally set at a level that is 25% to 35% below the current level of the underlying asset. For example, if the S&P 500® Index is 1,300 on the pricing date/trade date, the level may generally be set at between 845 and 975.
- There is no appreciation potential beyond the coupon payments. The

aggregate coupon payments and the total return are typically capped by a maximum interest rate for hybrid leveraged curve accrual notes, or by the annual rate for hybrid range accrual notes and hybrid curve accrual notes.

- There will be no upside participation in the non-interest rate underlying asset but declines in such asset can reduce interest payments, possibly to zero.
- The notes may or may not be subject to issuer discretionary call or automatic redemption.
- If the notes are redeemed prior to maturity pursuant to the terms of a specific offering, investors will receive no further coupon payments and may have to reinvest proceeds in a lower rate environment.

##### **Hypothetical Terms: 15-Year Hybrid Leveraged Curve Accrual Notes Based on the Spread Between 30 CMS and 2 CMS and the S&P 500® Index (Non-Callable)**

These hybrid leveraged curve accrual notes differ from other interest rate linked structured investments as they link to both interest rates and an equity underlier. In the first two years, these notes pay interest at 10% per annum. In years three through 15, for each day that the closing value of the S&P 500® Index is at or above 935, interest will accrue at a variable per annum rate equal to five times the difference, if any, between the 30 CMS and 2 CMS as determined on the related CMS reference determination date. The interest rate for each floating interest payment period is subject to a maximum interest

## Example 5: Hypothetical Payout Table

The table below presents examples of hypothetical interest rates that would accrue on the notes during any quarter in the floating interest rate period based on the total number of calendar days on which the closing level of the S&P 500® Index is greater than or equal to 935 and the spread between 30 CMS and 2 CMS on the CMS reference determination date. The table assumes that the interest payment period contains 90 calendar days and reflects a leverage factor of 5 and a maximum interest rate of 11% per annum. The examples below are for illustration purposes only and would provide different results if different assumptions were made.

30CMS-2CMS	5 × (30CMS-2CMS)	Hypothetical Interest Rate (per annum)						
		Number of calendar days on which the closing value of the S&P 500® Index is greater than or equal to 935						
		0	10	20	30	50	75	90
-3.900%	0.00%	0.00%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%	0.0000%
-3.600	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-3.300	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-3.000	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-2.700	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-2.400	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-2.100	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1.800	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1.500	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-1.200	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-0.900	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-0.600	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
-0.300	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.000	0.00	0.00	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.300	1.50	0.00	0.1667	0.3333	0.5000	0.8333	1.2500	1.5000
0.600	3.00	0.00	0.3333	0.6667	1.0000	1.6667	2.5000	3.0000
0.900	4.50	0.00	0.5000	1.0000	1.5000	2.5000	3.7500	4.5000
1.200	6.00	0.00	0.6667	1.3333	2.0000	3.3333	5.0000	6.0000
1.500	7.50	0.00	0.8333	1.6667	2.5000	4.1667	6.2500	7.5000
1.800	9.00	0.00	1.0000	2.0000	3.0000	5.0000	7.5000	9.0000
2.100	10.50	0.00	1.1667	2.3333	3.5000	5.8333	8.7500	10.5000
2.200	11.00	0.00	1.2222	2.4444	3.6667	6.1111	9.1667	11.0000
2.400	11.00	0.00	1.2222	2.4444	3.6667	6.1111	9.1667	11.0000
2.700	11.00	0.00	1.2222	2.4444	3.6667	6.1111	9.1667	11.0000
3.000	11.00	0.00	1.2222	2.4444	3.6667	6.1111	9.1667	11.0000
3.300	11.00	0.00	1.2222	2.4444	3.6667	6.1111	9.1667	11.0000
3.600	11.00	0.00	1.2222	2.4444	3.6667	6.1111	9.1667	11.0000
3.900	11.00	0.00	1.2222	2.4444	3.6667	6.1111	9.1667	11.0000
4.200	11.00	0.00	1.2222	2.4444	3.6667	6.1111	9.1667	11.0000
4.500	11.00	0.00	1.2222	2.4444	3.6667	6.1111	9.1667	11.0000

Investors will receive the maximum coupon when the spread between 30 CMS and 2 CMS is greater than or equal to 2.2% on the CMS reference determination date, and the closing level of the S&P 500® Index is greater than or equal to 935 on each calendar day during the interest payment period.

rate of 11% per annum and a minimum interest rate of zero per annum.

**Summary of Hypothetical Terms:**

- Term: 15 years
- Interest: Years
  - Years one and two: 10% per annum;
  - Years three to maturity (floating interest rate period): leverage factor  $\times$  (30 CMS - 2CMS), subject to the daily closing level of the S&P 500® Index being greater than or equal to 935, and subject to a maximum interest rate of 11% per annum and a minimum interest rate of zero
  - The 30 CMS and 2 CMS for each floating interest payment period will be determined on the determination date prior to the related quarterly interest payment period.
  - If the spread between 30 CMS and 2 CMS on the reference determination date is zero or negative, no interest will be paid for that quarterly interest payment period. In addition, if on any day during a floating interest rate period the closing value of the S&P 500® Index is less than 935, no interest will accrue for that day.
- Leverage factor: five
- Interest payment period: quarterly
- Payment at maturity: par plus any accrued and unpaid interest, if any
- No early redemption

**Key Investment Rationale:** The potential yield of an interest rate linked structured investment can be enhanced by adding an underlying component from another asset class, e.g., the S&P 500® Index, the NASDAQ or gold. Structured investments that link to underlying assets

from two or more different asset classes are referred to as hybrid offerings. In exchange for enhanced potential yield relative to a structured investment without a hybrid feature (for example, as reflected by a higher leverage factor for an offering of leveraged curve accrual notes or a higher annual rate for an offering of range accrual notes), investors are assuming risks related to both the referenced interest rate(s) and the other referenced asset class. Due to the hybrid nature of these structured investments, there is an increased likelihood that the interest rate payable to the investor will be reduced and can potentially be zero.

This type of offering allows an investor to express a long-term view that longer term rates will remain sufficiently higher than short-term rates and that the level of the equity index will not decrease significantly during the term of the notes; and to seek yield or return above what can normally be achieved in traditional fixed income investments, while assuming the risk of variable or no income during years three through 15 of the term of the notes.

**Historical Information:** See Example 3.

**Common Interest Rate Hybrid Structures**

- **Hybrid Range Accrual Notes.** Interest accrues at an above market annual rate for each day that 6-month USD LIBOR is within a specified range and the S&P 500® Index is greater than or equal to a predefined level.
- **Hybrid Curve Accrual Notes.** Interest accrues at an above market annual rate for each day that the spread between

30 CMS and 2 CMS is greater than or equal to zero and the closing level of the S&P 500® Index is greater than or equal to a predefined level.

- **Hybrid Leveraged Curve Accrual Notes.** Interest accrues at an above market rate equal to the reference curve multiplied by a leverage factor for each day that the S&P 500® Index is greater than or equal to a predefined level, subject to a maximum interest rate.

In all instances, the actual interest rate paid to the investor can be below market rates and can be zero.

**EXAMPLE 6: INTEREST RATE LINKED NOTES WITH AUTOMATIC REDEMPTION FEATURE**

**Summary:**

*These notes will typically be automatically redeemed if the relevant underlying asset decreases or increases to a specified threshold on an observation date.*

- All payments are subject to the issuer's credit risk.
- They are typically long-term investments, subject to the automatic redemption feature.
- Automatic redemption is based solely on the performance of the underlying asset(s).
- The underlying asset(s) for the purpose of determining automatic redemption can be a reference interest rate or another asset class.
- If the notes are redeemed prior to maturity, investors will receive no further coupon payments and may have to reinvest the proceeds in a lower rate environment.

- Common underlying interest rates include: CMS (with various maturities) and CMT (with various maturities). The S&P 500 Index is a common non-interest rate reference asset.
- The notes are designed to express a medium- or long-term view of the reference interest rate or non-interest rate reference asset.
- There is no appreciation potential beyond the coupon payments.

**Hypothetical Terms: 15-Year Step-up Notes with Automatic Redemption Based on the 10-Year Constant Maturity Swap (10 CMS) Rate**

The notes pay interest at fixed rates that increase gradually (“step-up”) over the full term. Beginning in the fourth year, the notes are subject to automatic redemption if the 10 CMS is greater than or equal to 2.5% on a specified observation date. The notes will pay principal plus any accrued interest at maturity or upon early redemption.

**Summary of Hypothetical Terms:**

- Term: 15 years
- Interest:
  - Years 1 to 3: 5% per annum
  - Years 4 to 6: 5.5% per annum
  - Years 7 to 9: 6% per annum
  - Years 10 to 12: 7% per annum
  - Years 13 to maturity: 8% per annum
- Interest payment period: quarterly
- Automatic early redemption: After the third year, the notes will be automatically redeemed at par, if on any observation date, the 10 CMS rate is greater than or equal to 2.5%.
- Observation dates: quarterly

**Key Investment Rationale:** The notes offer a step-up interest payment during the 15-year term, subject to the automatic early redemption feature after three years. If the notes are redeemed, investors will not be able to benefit from the higher interest rates applicable to the later years of the term of the notes and may have to reinvest the proceeds in a lower rate environment. This type of offering allows an investor seeking current income to express a view on the future direction of a specific interest rate.

**EXAMPLE 7: SECURITIES WITH PAYMENT AT MATURITY LINKED TO AN INTEREST RATE**

**Summary:**

*These securities typically do not provide coupon/interest payments, but typically provide a payment at maturity greater than or less than the stated principal amount, based on the performance of an underlying interest rate.*

- All payments are subject to the issuer’s credit risk.
- Investors may be exposed to full or partial principal loss.
- The securities typically do not provide coupon/interest payment.
- Investors can use the notes to express a short-term (6 to 24 months) view with respect to a specific interest rate.
- Common underlying interest rates include: CPI, LIBOR, CMT Curve and CMS Curve.

**Hypothetical Terms: 18-Month Securities Based on the 10-Year Constant Maturity Treasury Rate (10 CMT)**

The securities do not pay interest. Instead, at maturity, the securities will pay an amount that is greater than or less than the stated principal amount based on performance of 10 CMT as of the final valuation date. If the level of 10 CMT on the final valuation date is above or equal to its level on the pricing date/trade date (the initial level), the securities will pay 110% of the stated principal amount at maturity. If 10 CMT on the final valuation day is below its initial level, the securities will pay only 95% of the stated principal amount at maturity.

**Summary of Hypothetical Terms:**

- Term: 18 months
- Interest: none
- Payment at maturity:
  - If 10 CMT on the final valuation date is greater than or equal to the initial level, 110% of the stated principal amount.
  - If 10 CMT on the final valuation date is less than its initial level, 95% of the stated principal amount.
- Early redemption: none.

**Key Investment Rationale:** The securities provide the potential of an above market return at maturity if the investor’s view on the direction of 10 CMT is realized. This type of offering may be appropriate for investors who have a view on the future direction of a specific interest rate and who are willing to forgo current income and be exposed to partial principal risk in exchange for the potential to receive such return.

**INFLATION PROTECTION INVESTMENTS**

During periods of high and/or increasing inflation, the cash flows from traditional fixed rate investments diminish in value, and the investments themselves can depreciate in value. Inflation can significantly erode the value of and the cash flows from investors' portfolios.

An inflation-linked structured investment may be a potential hedge against high and sustained inflation, as it pays out periodic current income contingent upon changes in indices which measure the level of inflation, such as the Consumer Price Index (CPI). Such investments may provide a consistent inflation-adjusted rate of return to investors.

**EXAMPLE: 7-YEAR FLOATING RATE NOTES BASED ON THE CPI**

These notes pay interest at 5% in the first year and thereafter pay interest at a rate equal to the year-over-year change in CPI plus a spread of 2%, subject to a maximum interest rate of 6% and a minimum interest rate of zero.

**Hypothetical Terms:**

- Term: seven years
- Interest: First year: 5% per annum
  - Years 2 to maturity:  $[(CPI_t - CPI_{t-12}) / CPI_{t-12}] + 2\%$ , subject to a maximum interest rate of 6% per annum and a minimum interest rate of zero;
    - $CPI_t =$  CPI for the applicable reference month;

- $CPI_{t-12} =$  CPI for the twelfth month prior to the applicable reference month, and
- Reference month = the third calendar month prior to the month of the related interest reset date.

- Interest payment period: monthly
- Payment at maturity: par plus accrued and unpaid interest, if any
- No early redemption
- The interest paid on the notes after the first year is a measure of the year-over-year change in the CPI.

**Key Investment Rationale:** This type of offering provides an investor concerned about inflation and seeking protection from the potential erosion of purchasing power during high inflationary periods a potential hedge against high and sustained inflation.

**Summary of Inflation Protected Investments**

- All payments are subject to the issuer's credit risk.
- In periods of deflation, the interest rate may be as low as zero. Therefore, investors may not receive coupon payments for substantial periods of time, or may not receive any coupon payments during the entire floating interest rate period.
- Common underlying interest rates include CPI and the consumer price indices of other countries.
- The notes may have a hybrid component.

# Additional Information and Resources

## **Important Benchmark Interest Rates**

There are several reference interest rates that are fundamental to the understanding of Interest Rate Linked Structured Investments.

### **Federal Funds Rate**

The interest rate at which commercial banks lend reserves to other depository institutions. The target Federal Funds Rate is set by the Federal Open Market Committee at periodic interest rate meetings.

### **Treasuries**

Bonds of varying maturities issued by the U.S. Treasury. Treasuries are deemed to have little or no default risk, and as such, their rates are used as the benchmark risk-free rate in the market. The difference in yield between short-term and long-term treasuries is called the yield curve and can be used to calculate future implied interest rates.

### **CMT Rate**

Constant Maturity Treasury rates (or CMTs) are yields interpolated by the U.S. Department of the Treasury from its daily yield curve at fixed maturities. That yield curve, which relates the yield on a U.S. Treasury security to its time to maturity, is based on the closing market bid yields on actively traded U.S. Treasury securities in the over-the-counter market.

### **LIBOR**

The London Interbank Offer Rate. Set every day at 11 AM London time, LIBOR is a proxy for the rate at which banks are willing to make unsecured loans to each other in the offshore market. LIBOR has traditionally been seen as the interest rate approximating where AA rated banks would be able to borrow in the market.

### **Swap Rate (e.g., CMS)**

An interest rate swap is a contract in which two parties agree to exchange floating and fixed payments. The floating rate is often based on LIBOR while the fixed rate is the fixed coupon offered in return for the stream of floating rate payments. The quoted swap rate is the fixed rate offered in exchange for the floating LIBOR rate. For example, a Constant Maturity Swap (CMS) rate is, on any day, the fixed rate of interest payable on an interest rate swap with a given maturity, in order to receive a floating rate (paid quarterly) equal to 3-month LIBOR for that same maturity.

### **Inflation Rate**

The rate at which the price level of goods and services changes over time. In the United States, the rate of inflation is often measured by the Consumer Price Index (CPI).

These important benchmark interest rates have recently experienced

significant volatility as related to their historic levels especially as a result of the 2008 financial crisis. You should carefully read and consider the risk factors set forth under “Selected Risk Considerations” in this document as well as the specific risk factors included in the offering documents for any particular Interest Rate Linked Structured Investment, before you decide to invest.

# Selected Risk Considerations

**I**nvesting in Interest Rate Linked Structured Investments involves a number of risks, including risks not associated with an investment in ordinary fixed or floating rate notes, including, but not limited to, fluctuations in the underlying interest rates, fluctuations in the non-interest rate underlying asset or assets, if any, and other events that are difficult to predict and are beyond the issuer's control.

Accordingly, prospective investors should consult their financial and legal advisors as to the risks entailed by an investment in Interest Rate Linked Structured Investments and the suitability of Interest Rate Linked Structured Investments in light of their particular circumstances. Each type of Interest Rate Linked Structured Investment has specific risks associated with the particular underlying rate and the particular non-interest rate underlying asset or assets, if any, to which the note is linked and the particular structure and terms of that note. You should carefully read and consider the risk factors included in the offering document for any Interest Rate Linked Structured Investment before you decide to invest. The following are general risks applicable to almost all types of Interest Rate Linked Structured Investments:

## **YIELD RISK**

**Many Interest Rate Linked Structure Investments may not pay interest for substantial periods of time, or may not pay interest throughout the entire term of the investments.** Depending on the terms of each particular offering, interest payments on many Interest Rate Linked Structured Investments are based on performance of the underlying asset(s) with no minimum interest rate and/or no period of fixed-rate interest payment. If the value of the underlying asset(s) is outside the range specified by the terms of such offering, no interest will accrue for the related period. Therefore, investor may not receive interest payment on such Investments for substantial periods of time, or may not receive any interest throughout the term of the Investments.

**Hybrid Interest Rate Linked Structured Investments expose investors to additional risks.** Certain Interest Rate Linked Structured Investments are linked to both the reference interest rate(s) and another asset class, such as an equity index. Investors are assuming risks related to both the reference interest rate(s) and the other asset class. Due to the hybrid nature of these structured investments, there is an increased likelihood that the interest rate payable to the investor will be reduced and can potentially be zero. For example, in an offering where interest accrues

only for days on which 6-month USD LIBOR is at or below a specified level and the S&P 500® Index is at or above a specified threshold, no interest will accrue for any day if either 6-month USD LIBOR is above the specified level or the S&P 500® Index is below the specified threshold.

## **ISSUER CREDIT RISK**

**Any payments of interest, payments upon early redemption or payments at maturity on Interest Rate Linked Structured Investments are subject to the credit risk of the issuer and any actual or anticipated decline in the issuer's credit ratings and credit spreads may adversely affect the market value of the Interest Rate Linked Structured Investments.** Under the terms of some Interest Rate Linked Structured Investment, the issuer is obligated to return the stated principal amount at maturity, even if the underlying rate or reference index underperforms. However, as with an ordinary debt security, investors are dependent on the issuer's ability to pay all amounts due on the Interest Rate Linked Structured Investments, including payment due at maturity, and therefore investors are subject to the credit risk of the issuer. Interest Rate Linked Structured Investments are not guaranteed by any other entity. If the issuer defaults on its obligations under an Interest Rate Linked Structured

Investment, the investment would be at risk and an investor could lose some or all of his or her investment. In addition, the investor does not have a security interest in, or any other access to, the underlying asset(s). As a result, the market value of the Interest Rate Linked Structured Investment prior to maturity will be affected by changes in the market's view of the issuer's creditworthiness. Any actual or anticipated decline in the issuer's credit ratings or increase in the credit spreads charged by the market for taking credit risk of the issuer is likely to adversely affect the market value of the Interest Rate Linked Structured Investment.

#### **EARLY REDEMPTION RISK**

**Many types of Interest Rate Linked Structured Investments can be redeemed prior to maturity either at issuer's discretion or automatically based on performance of the underlying assets.** In many types of Interest Rate Linked Structured Investments, the issuer retains the option to redeem the Interest Rate Linked Structured Investment prior to maturity. It is more likely that the issuer will redeem the Interest Rate Linked Structured Investment prior to its stated maturity date to the extent that the amount of interest payable for a particular interest payment period is greater than that on instruments of a comparable maturity and credit rating in the market. Alternatively, many Interest Rate Linked Structured Investments may have an automatic redemption feature based on the performance of certain underlying assets, which means that the notes will be automatically redeemed if the

level of the underlying asset increases or decreases to a specified threshold. If an Interest Rate Linked Structured Investment is redeemed prior to its stated maturity date either at the issuer's discretion or pursuant to an automatic redemption provision, investors will receive no further interest payments on the notes redeemed and may have to reinvest proceeds in a lower rate environment and may not be able to reinvest at comparable terms or returns.

#### **MARKET RISK**

**The price at which Interest Rate Linked Structured Investments may be sold prior to maturity will depend on a number of factors and may be substantially less than the amount for which they were originally purchased.** Some of these factors include, but are not limited to: (i) changes in the level of the underlying rate or inflation-linked index (ii) volatility of the underlying rate or inflation-linked index (iii) changes in interest and yield rates, (iv) any actual or anticipated changes in the credit ratings or credit spreads of the issuer and (v) the time remaining to maturity. In addition, certain Interest Rate Linked Structured Investments are linked to both an interest rate and also another asset class, such as an equity index. Therefore, geopolitical conditions and economic, financial, political or judicial events that affect the securities underlying the reference index or equity markets generally may also affect the price of these types of Interest Rate Linked Structured Investments. Generally, the longer the time remaining to maturity and the

more tailored the exposure, the more the market price of the Interest Rate Linked Structured Investments will be affected by such factors. This can lead to significant adverse changes in the market price of securities like the Interest Rate Linked Structured Investments.

**The inclusion of commissions and projected profit from hedging in the original issue price is likely to adversely affect secondary market prices of Interest Rate Linked Structured Investments.** Assuming no change in market conditions or any other relevant factors, the price, if any, at which the issuer is willing to purchase the Interest Rate Linked Structured Investments at any time in secondary market transactions will likely be significantly lower than the original issue price, since secondary market prices are likely to exclude commissions paid with respect to the Interest Rate Linked Structured Investments and the costs of hedging the issuer's obligations under the Interest Rate Linked Structured Investments that will be included in the original issue price. The cost of hedging includes the projected profit that the issuer's subsidiaries may realize in consideration for assuming the risks inherent in managing the hedging transactions. These secondary market prices are also likely to be reduced by the costs of unwinding the related hedging transactions. In addition, any such prices may differ from values determined by pricing models used by the issuer, as a result of dealer discounts, mark-ups or other transaction costs.

**Interest rates have recently been more volatile in the past.** Due to the recent financial turmoil and global debt

concerns, important benchmark interest rates have recently experienced significant volatility as compared to historical levels.

**Interest Rate Linked Structured Investments are often long dated.** Many types of Interest Rate Linked Structured Investments have long terms ranging from five years to twenty years. Therefore, investors will not have access to their principal and will be subject to the changes and volatility of the underlying assets and the issuer's credit risk for a long period of time. Investors might not be able to sell the Interest Rate Linked Structured Investments they hold prior to maturity due to the lack of liquidity for such Investments. Even if they are able to sell such Investments in the secondary market, they may suffer a substantial loss on their initial investment.

#### **LIQUIDITY RISK**

**Interest Rate Linked Structured Investments are generally not listed on any securities exchange.** Therefore, there may be little or no secondary market for Interest Rate Linked Structured Investments. The issuer may, but is not obligated to, make a market in Interest Rate Linked Structured Investments. Even if there is a secondary market, it may not provide enough liquidity to allow investors to trade or sell the Interest Rate Linked Structured Investments easily. Since the issuer does not expect that other broker-dealers will participate significantly in the secondary market for Interest Rate Linked Structured Investments, the price at

which investors may be able to trade their Interest Rate Linked Structured Investments is likely to depend on the price, if any, at which the issuer is willing to transact. If at any time, the issuer were not to make a market in Interest Rate Linked Structured Investments, it is likely that there would be no secondary market for the Interest Rate Linked Structured Investments. Accordingly, investors should be willing to hold their Interest Rate Linked Structured Investments to maturity.

#### **CONFLICTS OF INTEREST**

**The issuer, its subsidiaries or affiliates may publish research that could affect the market value of the Interest Rate Linked Structured Investments, and also expect to hedge the issuer's obligations under the Interest Rate Linked Structured Investments.** The issuer or one or more of its affiliates may, at present or in the future, publish research reports with respect to movements in interest rates generally or each of the components making up the underlying rate or reference index to which any specific Interest Rate Linked Structured Investment is linked. Such research may be modified from time to time without notice and may express opinions or provide recommendations that are inconsistent with purchasing or holding the Interest Rate Linked Structured Investment. Any of these activities may affect the market value of the Interest Rate Linked Structured Investment. In addition, the issuer's subsidiaries expect to hedge the issuer's obligations under the Interest Rate

Linked Structured Investments and they may realize a profit from that expected hedging activity even if investors do not receive a favorable investment return under the terms of the specific Interest Rate Linked Structured Investment or in any secondary market transaction.

**The calculation agent, which is generally a subsidiary or affiliate of the issuer, will make determinations with respect to the Interest Rate Linked Structured Investments.** For most Interest Rate Linked Structured Investments, a subsidiary or affiliate of the issuer is designated to act as calculation agent to calculate the interest payment and/or payment at maturity due on the Interest Rate Linked Structured Investment. Any of these determinations made by the calculation agent may adversely affect the payout to investors.

#### **PAST PERFORMANCE NOT INDICATIVE OF FUTURE RESULTS**

**The historical performance of an underlying rate or reference index is not an indication of future performance.** Historical performance of an underlying rate or reference index to which a specific Interest Rate Linked Structured Investment is linked should not be taken as an indication of the future performance of the underlying rate or reference index during the term of the Interest Rate Linked Structured Investment. Changes in the levels of the underlying rate or reference index will affect the trading price of the Interest Rate Linked Structured Investment, but it is impossible to predict whether such levels will rise or fall.

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