Structured Investments Solution Series Volume III:

# Reverse Exchangeables



Earn Higher Yields with Contingent Principal Protection



### Introduction

FOCUSING ON YOUR FINANCIAL GOALS can be challenging during periods of extreme market volatility. While your brain may tell you that staying the course is the smartest strategy, your stomach may lead you to make impulsive investment decisions. For many investors, finding the optimal balance between risk and reward—and having the fortitude to maintain that balance over the long haul—is no easy task.

In recent years, new Structured Investments have been introduced in the U.S. to help investors meet their objectives. Generally, Structured Investments can help you achieve three primary objectives: investment returns with little or no principal at risk, higher returns in a range-bound market with or without principal protection, as well as alternatives for generating higher yields in a low-return environment. They also provide you with an opportunity to access asset classes, such as commodities and foreign currencies, which in the past were primarily available to institutional investors.

You can use Structured Investments to achieve greater diversification, to gain or hedge exposure to certain asset classes, or to align your portfolio with a particular market or economic view. They provide asymmetrical returns, meaning that returns will be higher or lower than those derived from a direct investment in a particular asset. Structured Investments usually combine a debt security with an underlying asset, such as an equity, a basket of equities, a domestic or international index, a commodity, or some type of hybrid security.

These investments have long been popular in Europe and Asia and over the past several years, they have started to gain acceptance among U.S. investors. According to the Structured Products Association, nearly \$64 billion in new products were issued in 2006, up from \$48 billion in 2005.

This report examines the role that Reverse Exchangeables can play in your portfolio, especially during periods when expectations for capital appreciation are range-bound. The report also discusses how Reverse Exchangeables can help you earn a higher yield with contingent principal protection.

#### 1. www.structuredproducts.org

The discussion contained in the following pages is for educational and illustrative purposes only. The preliminary and final terms of any securities offered by JPMorgan Chase & Co. will be different from those set forth in general terms in this report and any such final terms will depend on, among other things, market conditions on the applicable launch and pricing dates for such securities. Any information relating to performances contained in these materials is illustrative and no assurance is given that any indicated returns, performance, or results, whether historical or hypothetical, will be achieved. The information in this report is subject to change, and JPMorgan undertakes no duty to update these materials or supply corrections. This material shall be amended, superseded, and replaced in its entirety by a subsequent preliminary or final term sheet and/or pricing supplement, and the documents referred to therein, which will be filed with the Securities and Exchange Commission, or SEC. In the event of any inconsistency between the materials presented in the following pages and any such preliminary or final term sheet or pricing supplement, such preliminary or final term sheet or pricing supplement shall govern.

IRS Circular 230 Disclosure: JPMorgan Chase & Co. and its affiliates do not provide tax advice. Accordingly, any discussion of U.S. tax matters contained herein (including any appendix) is not intended or written to be used, and cannot be used, in connection with the promotion, marketing or recommendation by anyone unaffiliated with JPMorgan Chase & Co. of any of the matters addressed herein or for the purpose of avoiding U.S. tax-related penalties.

2 Autumn 2007

#### Augmenting Returns in a Low-Return Environment

In three out of the four years between 2003 and 2006, stocks, as measured by the total return of the S&P 500® Index, logged double-digit gains. During such periods of relative economic strength, investing in stocks can be particularly rewarding. But what happens when the outlook for the economy and stocks in particular, becomes less certain? That's when stocks often move in a sideways direction, with no meaningful moves to the upside or to the downside. Under these conditions, investors have been limited to middling returns from their stock portfolios. Similarly, it's not uncommon for fixed-income investments to experience periods when returns are flat or in the low single digits.

If you believe that returns for stocks or bonds are likely to be range-bound over the short term, a Reverse Exchangeable can help you implement, or "monetize," this view. Reverse Exchangeables enable you to earn potentially higher yields in a low-return environment, while providing contingent principal protection.

# Anatomy of a Reverse Exchangeable

A Reverse Exchangeable is a hybrid security that pays a fixed coupon and provides contingent protection for your investment principal. The specific terms and conditions of every Reverse Exchangeable vary, but they are typically linked to the performance of a particular stock, a basket of stocks or a stock market index. They are issued as registered

notes, mature within one year or less, and trade in \$1,000 increments. The coupon from a Reverse Exchangeable is taxed partially as interest on deposit and as put premium.

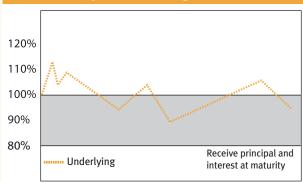
The primary appeal of a Reverse Exchangeable is its high coupon, which typically ranges between 10% and 20%. Under most conditions, this yield is higher than what you might attain from a traditional bond or money market investment. Unlike a direct investment in a stock or bond, however, your upside potential on a Reverse Exchangeable is limited to the coupon amount. If the underlying asset appreciates in value during the term of the note, you do not participate in those gains. Therefore, Reverse Exchangeables may be appropriate if you believe that the return on the underlying security will be lower than the coupon rate you can earn over the short term (one year or less).

The coupon on a Reverse Exchangeable is determined by the volatility of the underlying stock or basket of stocks, as well as the amount of contingent protection incorporated. The dividend vield of the underlying stock will also factor into the coupon rate—the higher the dividend, the higher the coupon rate. Once determined, the coupon rate remains fixed regardless of how the underlying asset performs. The frequency of interest payments varies and may occur periodically throughout the term of the note or may pay in full at maturity. In all cases, the frequency of interest payments is determined and disclosed at inception.

In addition to providing high coupon rates, Reverse Exchangeables feature a "contingent buffer." This contingent buffer, which typically ranges between 20% and 30%, protects your principal in the event of a moderate decrease in the value of the underlying security.

This buffer disappears or gets "knocked out" if the security closes below the buffer level at any time during the life of the note. If that occurs, and the stock does not close above its initial level on the final observation date, you may receive physical settlement at maturity, that is, actual shares of the underlying security (assuming the underlying asset is a single stock) or the cash value of the actual shares. Reverse Exchangeables linked to a commodity or index offer cash settlement under these circumstances. You should be comfortable with the prospect of holding shares of the underlying asset before investing in a Reverse Exchangeable.

Figure 1: Return: Reverse Exchangable on ABC stock at \$10. Features 20% coupon and 20% contingent buffer.



Source: JPMorgan

#### Reverse Exchangeable Performance under Different Market Conditions

To understand how a Reverse Exchangeable might perform under varying market conditions, consider the following hypothetical example. David invests \$1,000 in a Reverse Exchangeable linked to ABC stock. The Reverse Exchangeable pays a coupon rate of 20% and features a 20% contingent buffer. ABC stock is trading at \$10 a share.

There are several possible outcomes that can occur when a Reverse Exchangeable matures (see figure 1). If the underlying stock never falls below the level of its contingent buffer (\$8), you receive 100% of your principal back, along with any accrued interest due. For example, if the lowest closing price of ABC stock was \$9.50, you would receive your entire principal back (\$1,000), along with 20% interest (\$200). Because the stock never breached the 20% contingent buffer by falling below \$8 a share, your principal

remained protected.
The outcome would be the same if ABC stock breached the buffer, falling below \$8, but then closed above the initial level of \$10 a share on the final observation date.

Now consider what would have happened if ABC stock had fallen below \$8 and remained there on the final observation date (see

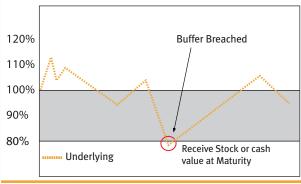
figure 2). In this case, you would receive physical delivery of 100 shares of ABC stock at maturity or its equivalent in cash, along with any accrued interest. The number of shares you receive is determined by dividing the stock price at inception by

the initial investment. For example, if ABC stock was

trading at \$10 at inception and you invested \$1,000, you would receive 100 shares at maturity. If the Reverse Exchangeable settled in cash, the cash payment would reflect the decrease in the price of the underlying asset on the final observation date. While the overall value of ABC stock fell, the high coupon rate that you received helped to offset the decline in the value of your stock.

Due to its coupon rate and contingent buffer, a Reverse Exchangeable will always outperform its underlying asset in a declining market. However, the maximum return is the coupon rate. Therefore, you must be willing to forgo any appreciation in the value of the underlying security in exchange for the coupon rate. If you have a neutral to moderately bullish short-term outlook, are seeking a coupon rate that is higher than current yields, and are comfortable taking on some downside risk, you may want to consider a Reverse Exchangeable.

Figure 2: Return: Reverse Exchangable on ABC stock at \$10. Features 20% coupon and 20% contingent buffer.



Source: JPMorgan

#### **IN BRIEF**

### **Reverse Exchangeables**

#### What benefits do they provide?

Reverse Exchangeables provide attractive coupon rates and contingent principal protection. They will always outperform the underlying security in a bear market, due to the coupon rates they pay. They typically mature in one year or less.

#### What's the downside?

If the underlying asset appreciates in value, you do not participate in those gains. The notes provide only contingent principal protection and that protection disappears or "knocks-out" if the underlying security closes below the predetermined contingent buffer level. You may receive physical shares at maturity or equivalent cash value.

### Reverse Exchangeables may be right for you if you:

- Have a range-bound view of the markets.
- Are an income-oriented investor.
- Are comfortable taking on some downside risk.

## Are Reverse Exchangeables Right for You?

Structured Investments, including Reverse Exchangeables, can provide innovative ways to help you meet your investment goals. To determine whether a Reverse Exchangeable is appropriate for you, review the following questions with your advisor:

- What is my investment time horizon?
- Do I have a bullish, bearish, or neutral market outlook?

- Am I willing to risk losing a portion of my principal?
- Am I seeking higher coupon rates in a flat to moderately bullish market?

The answers to these questions should help you determine whether Reverse Exchangeables belong in your portfolio. At a minimum, taking the time to gain a better understanding of your financial goals and risk tolerance will be its

#### **Certain Risk Considerations**

#### Reverse Exchangeables

An investment in a Reverse Exchangeable may result in a loss. The notes do not guarantee any return of principal. Under certain circumstances, you will receive at maturity a predetermined number of shares of the applicable underlying stock. The market value of those shares will most likely be less than the principal amount invested and may be zero.

Your return on a Reverse Exchangeable is limited to the principal amount plus accrued interest. For each \$1,000 principal amount note, your maximum return at maturity is \$1,000 plus any accrued and unpaid interest, regardless of any appreciation in the value of the applicable underlying stock, which may be significant. Accordingly, the return on a Reverse Exchangeable may be significantly less than the return on a direct investment in the applicable underlying stock.

Your contingent buffer may terminate on any day during the term of the Reverse Exchangeable. If on any day during the term of the notes the closing price of the underlying stock declines below the contingent buffer, you will at maturity be fully exposed to any depreciation in that reference stock. You will be subject to this potential loss of principal unless at maturity the price of the applicable underlying stock subsequently recovers to an amount in excess of its initial level on the pricing date.

6 Autumn 2007

## Experience the JPMorgan Advantage

JPMorgan Structured Investments are designed to complement your overall investment strategy. New solutions are under constant development to provide you with additional opportunities to enhance your portfolios. Experience the unique benefits of JPMorgan Structured Investments, including:

- Innovative Structured Investments that span all of the major asset classes.
- One of the lower investment minimums in the industry.
- Direct access to Structured Investment specialists who can guide you and your advisor.
- A commitment to education demonstrated through teach-ins, conference calls, and educational materials.

The information contained in this document is for discussion purposes only. The final terms of any securities offered by JPMorgan Chase & Co. may be different from the terms set forth herein and any such final terms will depend on, among other things, market conditions on the applicable pricing date for such securities. Any information relating to performance contained in these materials is illustrative and no assurance is given that any indicated returns, performance, or results, whether historical or hypothetical, will be achieved. These terms are subject to change, and JPMorgan undertakes no duty to update this information. This document shall be amended, superseded, and replaced in its entirety by a subsequent preliminary or final term sheet and/or pricing supplement, and the documents referred to therein, which will be filed with the Securities and Exchange Commission, or SEC. In the event of any inconsistency between the information presented herein and any such preliminary or final term sheet or pricing supplement, such preliminary or final term sheet or pricing supplement shall govern.

**SEC Legend:** JPMorgan Chase & Co. has filed a registration statement (including a prospectus) with the SEC for any offerings to which these materials relate. Before you invest, you should read the prospectus in that registration statement and the other documents relating to this offering that JPMorgan Chase & Co. has filed with the SEC for more complete information about JPMorgan Chase & Co. and this offering. You may get these documents without cost by visiting EDGAR on the SEC Web site at www.sec.gov. Alternatively, JPMorgan Chase & Co., any agent or any dealer participating in this offering will arrange to send you the prospectus and each prospectus supplement as well as any product supplement and term sheet if you so request by calling toll-free 866-535-9248.

**IRS Circular 230 Disclosure:** JPMorgan Chase & Co. and its affiliates do not provide tax advice. Accordingly, any discussion of U.S. tax matters contained herein (including any attachments) is not intended or written to be used, and cannot be used, in connection with the promotion, marketing or recommendation by anyone unaffiliated with JPMorgan Chase & Co. of any of the matters address herein or for the purpose of avoiding U.S. tax-related penalties.

Investment suitability must be determined individually for each investor, and the financial instruments described herein may not be suitable for all investors. The products described herein should generally be held to maturity as early unwinds could result in lower than anticipated returns. This information is not intended to provide and should not be relied upon as providing accounting, legal, regulatory or tax advice. Investors should consult with their own advisors as to these matters.

This material is not a product of JPMorgan Research Departments. Structured Investments may involve a high degree of risk, and may be appropriate investments only for sophisticated investors who are capable of understanding and assuming the risks involved. JPMorgan and its affiliates may have positions (long or short), effect transactions or make markets in securities or financial instruments mentioned herein (or options with respect thereto), or provide advice or loans to, or participate in the underwriting or restructuring of the obligations of, issuers mentioned herein. JPMorgan is the marketing name for JPMorgan Chase & Co. and its subsidiaries and affiliates worldwide. J.P. Morgan Securities Inc. is a member of NASD, NYSE, and SIPC. Clients should contact their salespersons at, and execute transactions through, a JPMorgan entity qualified in their home jurisdiction unless governing law permits otherwise.

