Winning Converts

Reverse convertibles and other structured investments promise to boost returns and limit risks. By Michael Iver and Jon Asmundsson

>Buffered Trade
Type RPPT <Go> for performance models on structured investment strategies. **Type 3 <Go>** to analyze a buffered protected trade on the S&P 500 Index.

IN THE YEARS after the dot-com bubble burst in 2000, U.S. investors were hungry for anything that could give their portfolios a boost—or at least stanch the bleeding. Stocks plunged. The Standard & Poor's 500 Index lost half of its value from its 2000 peak to its low in 2002. Bonds or money markets didn't look much better. Yields on Treasuries fell to the lowest in four decades. "There was nowhere to hide," says Keith Styrcula, chairman of the New York–based Structured Products Association. One result, he says, was that a new class of securities gained a foothold on Wall Street.

Managers of assets for high-net-worth investors led the trend, offering debt instruments designed to mimic derivatives-based strategies. These securities promised a way to limit losses and enhance returns, and they became known as "structured" investments. "Around 2000–2003, structured products became very prominent in portfolios of private banks such as JPMorgan and Merrill Lynch and Morgan Stanley," Styrcula says. The new approach "was so useful that they started mass marketing it for retail investors at minimums of $1,000," he says. The market for these structured investments is likely to top $100 billion in the U.S. this year, according to Styrcula's trade group, up from $28 billion in 2003.

Protecting against further drops in the stock market was key, says Rhian Horgan, global head of equity derivatives at JPMorgan Chase & Co.'s private banking arm, which oversees $430 billion for its clients, who include more than 180 billionaires. Investors hurt by the S&P 500 Index's slide from 1,553 to 769 wanted protection before they would even consider buying stocks again. "So we started putting together strategies that gave clients some protection on the next 10 percent downside in the equity market, and they financed that by selling away the upside above 14–15 percent annualized returns," Horgan says.

HOW WOULD SUCH a strategy work? An investor who trades derivatives would sell a call option on a stock index, giving someone the right but not the obligation to buy the index at a price 14 or 15 percent above the current level. Returns would thus be capped if the index rose further, but the proceeds from selling the call would be used to buy a put spread for protection against a decline. That option would deliver the index at its original level unless the index dropped 10 percent or more. This strategy, known as a buffered protected trade, keeps investors from losing their capital except in a steep sell-off.

Of course, most individual investors don't trade derivatives, which is why there's a market for the structured investments Horgan and others have developed. Wrapping up the derivatives strategies neatly as debt instruments is a crucial step. The investor doesn't face counterparty credit risk. Also, since investors typically pay face value to buy the bonds or notes, they avoid the margin requirements—and possible margin calls—that go with over-the-counter derivatives or exchange-traded options. "There's no situation

DANIEL ACKER/BLOOMBERG NEWS

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where we're asking the client to give us more money," Horgan says.

The Structured Retail Products (RPPT) function provides performance models for equity index derivatives trades. Type RPPT <Go> 3 <Go> for an example of a buffered protected trade based on the S&P 500. To change the underlying stock index, click on the arrow to the right of SPX Index and select a new benchmark, and press <Go>.

DURING THE PAST five years, so-called reverse convertibles, structured investments based on a single stock or basket of stocks, have become a popular offering. "Reverse convertibles are clearly what it's about," says Charlie O'Flaherty, co-head of private investor products for North America at ABN Amro Inc. in New York. These notes or bonds pay a high coupon, often in the teens, and at maturity deliver either their face value in cash or shares of the underlying stock, depending on the performance of the shares. Brian Jones, O'Flaherty's co-head at ABN Amro, says that in 2002 and '03, brokers told him that reverse convertibles rescued them after other equity-related trading ideas blew up. "We literally had a couple of brokers come to us and almost tear up and say, 'You know what? This product saved my book,'" he says.

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Here's how a reverse convertible on Apple Inc. stock might work. Say Apple shares were trading at $125 a share. A bank such as ABN Amro or Barclays Capital might issue a one-year note that pays a coupon of 17 percent and has a so-called knock-in put option with a barrier of 80 percent of the original share price. The investor pays $1,000 to buy the instrument. At maturity, provided Apple stock hasn't dropped to 80 percent of the initial price, the investor gets his $1,000 back plus 17 percent. If the shares dropped below the barrier level and finished below the initial price, then the investor receives shares of Apple plus the coupon. In this case, it would be eight shares of Apple per note (the face value divided by the initial share price). The stock risk is similar to owning the shares, but the 17 percent return is guaranteed and a decline of up to 20 percent makes no dent in the investor's capital.

The steady gains for equities during the past five years helped in the adoption of reverse convertibles, O'Flaherty says. "Not too many of these products have delivered shares," he says, which has helped build their credibility. Type SPX <Index> GPO W <Go> for a graph that shows the weekly performance of the S&P 500. Click on the Annotations button on the gray tool bar, and select % Change to draw graphics that show the size of the market's declines, which were each less than 10 percent from early 2003 to July of this year.

Horgan likens the use of derivatives to Lego blocks that can be snapped together to build different structures and achieve particular goals. "You can put all the pieces together in different ways," she says. Many of JPMorgan Private Bank's largest clients have a target return they're trying to achieve and a certain risk budget, or level of volatility, they're willing to accept. Structured investments can be used to balance those objectives. Derivatives strategies have also been created for retail investors who may be looking for something relatively simple, such as principal protection with a rate of return higher than those for time deposits, she says.

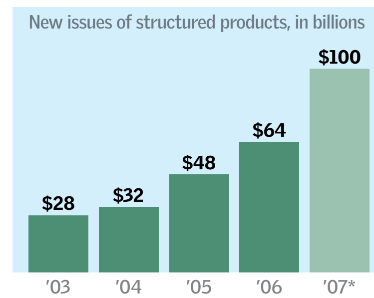
In the U.S., retail investors typically buy structured products from broker-dealers or registered investment advisers. By contrast, in Europe, where the structured products market is larger and more developed, investors can buy them at banks or on line through discount brokers. In January, Deutsche Börse AG and SWX Group teamed up to launch an exchange for trading structured products in Germany and Switzerland. In parts of Asia as well, the market is more developed than in the U.S., and the instruments trade in liquid markets.

Finding Reverse Convertibles

You can use the Current Markets (MRKT) function to access information on reverse convertible offerings and obtain secondary-market indicative prices for the securities. Type **MRKT <Go> 24 <Go>** for a menu of countries. Type 14 <Go> for a list of banks that issue or distribute reverse convertibles in the U.S. Click on the name of a bank for a list of its offerings. Click on an issue and type **DES <Go>** for information on the instrument and its underlying stock.

Note taking

U.S. sales of derivatives packaged as notes more than doubled during the past four years.



*Projection. Source: Structured Products Association

Because the U.S. market for structured investments is perceived to be in a relatively early state, there's been an influx of non-U.S. investment banks setting up shop to grab a piece of the market before it really takes off. As of July, 67 issuers were creating structured products in the U.S., says Philippe El-Asmar, head of investor solutions at Barclays Capital in New York.

The retail structured products industry—perhaps because it makes investment vehicles rather than raises capital for companies—uses industrial terms to describe itself. Issuing banks, such as ABN Amro and Barclays Capital, are called manufacturers. Intermediaries, such as Incapital LLC and LaSalle Bank, are termed wholesalers because they aggregate orders and provide products to retail dealers.

JOHN TESSAR, MANAGER of structured products at LaSalle's broker-dealer services division in Boca Raton, Florida, agrees that reverse convertibles have gained the trust of many U.S. investors. LaSalle, a unit of ABN Amro Holding NV, works with 16 manufacturers and distributes to broker-dealers in all 50 states. "Over the past four years, customers could have purchased these products, been told how they work, owned them and, at maturity, seen a result that was identical to the way it was explained," he says. Looking at how many reverse convertibles have delivered shares can be misleading, though, he says, because it implies that those deals had a bad outcome. In fact, including the coupon, such a deal may still be preferable to owning shares during the period, he says.

Barclays Capital, part of London-based Barclays Plc, is the leading U.S. issuer of reverse convertibles in terms of the number of issues. This year through the end of July, the firm had issued more than 500 of the equity-linked notes, which accounted for about one quarter of the market, El-Asmar says. As of the end of July, products that offer enhanced returns on an index—for example, double the gains of an underlying gauge capped at a set percentage gain—were overtaking reverse convertibles in terms of notional value, he says.

Barclays has also launched eight structured notes that trade on the New York Stock Exchange. They're linked to commodities, emerging markets, currencies and strategies. Type DJP US <Equity> DES <Go> for the Description page of the iPath Dow Jones–AIG Commodity Index Total Return ETN, an exchange-traded note that's linked to the performance of the commodities index. As of the end of July, $2.8 billion of the notes had been sold and trading of the issue had reached $10 billion, El-Asmar says.

Many people involved in creating and selling structured investments agree that educating investors and representatives about how the instruments work is one of the most important tasks facing the industry. Incapital, based in Chicago, created a Web site, www.structuredinvestments.com, that aims to demystify the instruments. Likewise, LaSalle created a Web site, www.lasallebondinstitute.com, at which broker-dealers can take courses in structured products. About 1,000 representatives had become certified through the site this year as of the end of July, Tessar says.

Despite these efforts, questions about the suitability of these products remain. On July 11, Massachusetts Secretary of the Commonwealth William Galvin announced that he was starting an investigation into how structured investments are sold. "These 'structured product' investments are highly complex and assume a level of research on the part of the investor which is higher than most securities require," Galvin said in a press release.

One investment adviser who uses a lot of structured products says regulators aren't necessarily wrong to want to look into sales practices in the industry. An investor who buys a reverse convertible is essentially selling a put on the underlying stock, says J. Scott Miller, managing partner at Blue Bell, Pennsylvania–based Blue Bell Private Wealth Management LLC, which oversees $300 million, of which about 30 percent is in structured products. For a derivatives trader, selling puts is in a category of trading that is "the most aggressive area there is," he says. Buyers of structured investments have none of the training that is required of a derivatives trader who wants to sell put options. "Do they really understand what they're getting?" he asks.

Miller says he typically uses index-based structured products to enhance returns or protect against losses. "As we all know, it's very difficult over any long period of time to outperform the index," he says.

In addition to diversifying from single-stock risk, Miller says, he compares offerings from multiple issuers to try to find better returns. For example, similar so-called accelerated return notes that offer double the upside of an index may have a cap that varies by as much as 50 percent. That means one may offer a 50 percent greater return than another for a similar price.

Miller also buys in the secondary market, where the instruments typically trade at a discount. "That's the fun part of it," Miller says. "It becomes modeling. It becomes math. And it becomes trying to get the best value you can for your money."

Press <Help> twice to send a question to the Bloomberg Analytics help desk.

Using OVSN to Price Reverse Convertibles

Reverse convertibles are debt instruments that are linked to the performance of a stock or a basket of stocks. They typically pay a high fixed coupon in return for assuming some or all of the downside risk of the equity. At maturity, the instruments deliver 100 percent of face value if the underlying stock trades above a set level. If the stock is below that level, they deliver shares of the underlying. For example, a reverse convertible that was struck when a stock traded at $100 per share could deliver 10 shares per $1,000 of face value if the stock traded at $80 at maturity. The shares would be worth $800, but if the instrument paid a coupon of 15 percent, the total value returned after a year by the structured product, $950, would be greater than the return of straight ownership of the shares during the period.

You can use the Equity Structured Notes (OVSN) function to analyze reverse convertibles and other equity-linked structured products. Type OVSN <Go> 1 <Go> to create a reverse convertible with barriers. To price such an instrument on Apple Inc., the Cupertino, California–based maker of the iPhone, tab in to the first field in the Ticker column, enter *AAPL US* and press <Go>.

To calculate prices for the instruments, OVSN uses implied volatility for stocks that have exchange-traded options and historical volatility for stocks that don't have options.

To set the level of the knock-in barrier for the instrument, tab in to the first field under Barrier. Enter *80,* for example, and press <Go> for a barrier that would provide contingent protection until the price of the underlying shares crossed 80 percent of their reference price.

To set the coupon rate, tab in to the Coupon field in the Bond section of the screen. Enter *17,* for example, and press <Go> for a deal that pays 17 percent. To calculate the prices of such a security, type 1 <Go>.

The Deal Outputs section of the screen displays prices for the deal. To the left of the Deal Outputs section, OVSN displays so-called Greeks, such as delta, for the note. Delta is a measure of the relative change in the structure's price given a 1 percent change in the price of the underlying.

You can also use OVSN to analyze existing reverse convertibles that have been entered into the Bloomberg database. For example, type GS 15 01/31/08 <Corp> DES <Go> for the Description page of a multibarrier reverse convertible issued by Goldman Sachs International on a basket of three European stocks that pays a coupon of 15 percent. Type OVSN <Go> to calculate a price for the instrument.

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>The Equity Structured Notes Function

Type OVSN <Go> to analyze structured products such as reverse convertibles.