

# 'Derivatives' devour the financial markets

by Anthony K. Wikrent

The U.S. public appears to believe that the preeminent financial market in the United States is the New York Stock Exchange. Every day, radio and television newscasters begin or end their "business" news with the most recent quotes on the Dow Jones Industrial Average, an index of the NYSE that is comprised of the stocks of 30 large companies, plus a roundup of the most lively "gainers" or "losers."

On the average trading day, about \$6 billion of stocks changes hands on the NYSE. That's a big market—\$1.520 trillion in 1991, or about one-quarter of the Gross National Product. But it's not nearly as large as the market for U.S. corporate bonds, where \$23.329 billion in bonds changed hands every trading day in 1991.

But, the corporate bond market is not as large as the market for U.S. government securities, where an average of \$127.405 billion in Treasury bills, notes, and bonds were traded each day in the first four months of 1991.

Almost three times bigger still are the currency markets, where \$1 trillion a day in different currencies changes hands around the world. About one-fifth of that takes place in the United States; London remains the world's largest center of currency trading, accounting for about one-third of the total.

But the largest market, by far, is the futures markets. Statistics for the dollar volume of futures trading in the United States are not available from anyone—not from the Commodity Futures Trading Commission, the Chicago Board of Trade, the Chicago Mercantile Exchange, the U.S. Department of the Treasury, the U.S. Department of Commerce, or the U.S. Federal Reserve System, or its member banks. The only data available are for the number of contracts sold.

Rough dollar volumes are known for a couple of contracts. In a speech given to the National Planning Association on May 1, 1992, Henry Kaufman, the former chief economist of Salomon Brothers, who has been described as the most prominent spokesman for the bond markets, noted that "measured in terms of the dollar value of the underlying shares traded, the average daily trading volume in the Standard & Poors futures contract is nearly double the daily turnover on the New York Stock Exchange."

The Standard & Poor's 500 futures contract—known as

a stock index future, or an equity index—is traded on the Chicago Mercantile Exchange, and costs \$500 multiplied by the index. As of the middle of 1991, about 75% of all money invested in indexing was tied to this contract. The other major stock index future is the Major Market Index, based on 20 underlying stocks, which trades on the Chicago Board of Trade. Since 1987, there have been persistent reports that purchases of these two futures contracts have been used by the U.S. government to stabilize the increasingly fragile New York Stock Exchange. On Aug. 26, 1992, *New York Post* business columnist John Crudele revealed that Norman Bailey, the chief economist of the National Security Council during the Reagan administration, had confirmed that such intervention had "given the stock market a helping hand at least once this year," as well as in 1987 and 1989.

In the *New York Times* on Aug. 18, 1992, columnist Floyd Norris wrote, "On the average day, traders now exchange futures that control \$285 billion in underlying government bonds." There are about half a dozen futures contracts based on U.S. government bonds. By contrast, there are over a hundred different futures contracts traded on U.S. exchanges. The major types are interest rate futures; agricultural commodities; energy products; foreign currencies and foreign currency indexes; equity indices (such as the S&P 500); precious metals; and non-precious metals.

## A \$150 trillion crap game

Based on a review of the prices of futures contracts of each of these types, *EIR's* economics staff selected an average price that was multiplied by the data available for the number of contracts traded. These average prices selected were little more than informed guesses. For example, for the type of futures with the largest dollar volume—interest rate futures—*EIR* used an average price of \$1 million for the 123.4 million such contracts traded in 1990. Some contracts cost less, such as a futures contract for a five-year Treasury Note, which carries a price of \$100,000.

According to this crude estimate, the total dollar volume of futures trading in the United States in 1990 was an incredible \$152.717 trillion—two orders of magnitude larger than the New York Stock Exchange, and almost 30 times larger than the GNP in 1990, which was \$5.519 trillion.

Given what is known about just half a dozen of the 100-plus futures contracts traded, this figure is probably in the right ballpark. The \$285 billion figure used by Norris in the *New York Times* comes to \$72.105 trillion when multiplied by 253 business days. The \$152.717 trillion figure arrived at by *EIR* is, therefore, if anything, probably too low. The total dollar volume may well actually be twice that.

A cautionary note is in order here. Futures contracts are highly leveraged. The major players, such as the money center banks and the Wall Street investment houses, may have to post a margin that is as low as 2.25%. Other less influential players have to deal with margins of around

5-10%. This past June, for example, the Chicago Mercantile Exchange cut the margin required to buy a S&P 500 futures contract by 45%, to only \$12,000, or just 5.9% of the \$203,300 value of the contract. Thus, a dollar volume of \$300 trillion does not mean that \$300 trillion is actually changing hands; what it does mean is that control of *underlying* financial instruments with a total value of \$300 trillion, is changing hands. Assuming an average margin of 5%, total dollar volumes of \$150-300 trillion a year mean that the actual amount of money changing hands is \$7.5-15 trillion each year.

Which value should be used for accounting purposes—the margin of cash actually put up, or the much larger face value of the futures contract—has proven to be a vexing question for securities and banking regulators, who have become increasingly concerned at the sheer magnitude of trading that is now taking place.

Do these financial instruments actually help companies which produce real, tangible goods, to hedge their risks, as the traders and other market maniacs argue? In a recent survey, the U.S. monthly magazine *Institutional Investor* found that only 29.4% of chief financial officers (CFOs) used exchange-listed interest rate (e.g., T-bond) futures and options; 11.0% used listed foreign exchange (currency) futures and options; 10.1% used listed equity (stock index) futures; and 13.8% used over-the-counter (not traded on the exchanges, but contracted directly with a counter-party) interest rate futures and options. The survey also found that futures and options derivatives of all types appear in only about one-fifth of corporate investment portfolios, and less than a third of pension fund portfolios.

The most used derivatives were interest rate swaps, employed by 78.9% of CFOs responding, followed by foreign exchange forwards (64.2%) and foreign exchange options (40.4%).

The major reason CFOs used these instruments was to protect their companies against swings in floating-rate bank debt (52.7% of CFOs responding); to access lower cost fixed rate debt not otherwise available without the use of derivatives (43.8%); to better manage strategic liabilities (40.2%); to protect their companies' overseas investments against currency value fluctuations (36.6%); and to access lower cost floating rate debt (35.7%).

What are the prospects that the incoming Clinton administration will stop these immense shell games? Given that the chief of the new National Economic Council is Robert E. Rubin, co-chairman of Goldman Sachs—the last large, privately held investment house on Wall Street—the answer must be: practically none. Like every other major bank—investment or commercial—Goldman Sachs now relies on trading for its own account for one-third to two-thirds of its profit. The *Wall Street Journal* on Nov. 9 profiled the “small but highly lucrative J. Aron & Co. commodities unit,” which Goldman Sachs acquired in 1981. About 300 people work in

J. Aron, compared to 6,451 for all of Goldman Sachs. But, of the \$1.15 billion in profits reported by Goldman Sachs in 1991, more than \$300 million came from J. Aron & Co. During just two days of currency trading during the collapse of the European Exchange Rate Mechanism last month, J. Aron traders reportedly made \$100-200 million.

## What are derivatives?

Derivatives are financial instruments, the price or value of which is derived from the price or value of an underlying financial instrument. There are three basic types of derivatives: futures contracts, swaps, and options.

A **futures contract** is a contractual agreement to buy or sell, on a specified future date, a standardized amount of some commodity at a price determined at the time that the futures contract is bought or sold. Not all futures contracts are derivatives. Futures for precious metals, petroleum, or agricultural commodities, for example, are not derivatives. Futures contracts for financial instruments did not exist before the 1970s, but in less than two decades, they have come to completely dominate the futures markets, accounting for around three-quarters of all contracts traded.

**Swaps** were largely legitimized in the early 1980s, and have thousands of permutations. The most widely used are **currency swaps** and **interest rate swaps**. In the latter, for example, a company with investments in Germany, which prefers to have interest paid in dollars rather than deutschmarks, agrees to swap interest payments with a company that has investments in the U.S., but prefers deutschmarks.

**Options** confer on the buyer the right, but not the obligation, to buy or sell the underlying financial instrument, thus providing somewhat more flexibility than a futures contract. In the U.S., trading in agricultural options was banned in 1936, following an attempt in 1933 to manipulate the wheat futures market using options. In the 1970s, trading of options tied to London commodity futures contracts became popular, but two large scandals led to an almost total ban in the U.S. by the Commodity Futures Trading Commission. As part of the deregulation craze under the Reagan regime, options trading in gold, Treasury bonds, and sugar was allowed beginning Oct. 1, 1982. Options trading is the smallest type of derivative, with a dollar volume in 1990 roughly estimated by *EIR* to be \$701 billion.