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Recent Financial Market Innovations

by Jay Glacy

Explosive innovation continues in the financial markets as new and diverse instruments are invented for tailoring exposure to major market indexes. My January 1996 *Product Development News* article, "Funding Tools for Indexed Products" surveyed a number of Standard & Poor's 500-based contracts that might be useful in hedging the risks associated with equity-indexed life insurance and annuity products or as a springboard for new and imaginative product designs. This article summarizes the basic features of some of the newer instruments appearing and suggests ways they might be of use to the product development actuary.

Diamonds

Like their S&P 500 counterparts called "spiders," diamonds are exchange-traded unit investment trusts that trade like common stocks on the American Stock Exchange under the symbol DIA. Diamonds commenced trading on January 20, 1998. On that day, diamonds set a new product record for opening- day volume on the Amex with more than 1.7 million shares changing hands. Each share is designed to track one one-hundredth the value of the Dow Jones Industrial Average, enabling investors to "buy" and "sell" the Dow at any time during the trading day. Officially, "diamonds" is an acronym for Dow Industrial Average MOdel New Depository Shares, and represent ownership in a unit investment trust holding a portfolio of common stocks designed to closely track the performance of the DJIA. Holders receive proportionate quarterly cash dividends, corresponding to the Dow stocks, less trust expenses of about 0.0020 per annum. Dow-based index products are appealing to individual investors (and thus to developers of new insurance products), as most continue to define the "market" as the DJIA. Indexed-annuity writers might find diamonds an effective and efficient funding mechanism for registered products. Further information about diamonds can be found at http://www.amex.com/diamonds/.

Index-Linked Notes

A number of Wall Street dealers offer equity-linked notes indexed to the S&P 500. An equity-linked note (ELN) combines the features of a zero-coupon or below-market-coupon bond with a supplemental return component (or "kicker") based on the performance of some underlying equity security or index. These contracts can be attractive to insurers because they provide equity exposure while receiving favorable RBC and fixed-income balance sheet treatments. For example, in May 1997 Bear Stearns issued a ten-year zero-coupon ELN maturing at par plus 106% of the relative change in the S&P 500 Index. Similarities to the structure of equity-indexed annuities are apparent. This note trades as symbol BSL on the Chicago Board Options Exchange (*http://www.cboe.com*). Other variants exist on the exchanges or can be customized by your friendly derivatives salesperson.

Options and Futures on the Dow

To the person on the street, the DJIA is still the most recognizable gauge of general stock market activity. On October 6, 1997, options and futures on the Dow began trading on the Chicago Board Options Exchange and the Chicago Board of Trade, respectively. The CBOE lists puts and calls expiring in the three near-term months and on the March quarterly cycle. These contracts (symbol: DJX) are European-style options exercisable only in cash at expiration. DJX options are based on a reduced value of the DJIA (one one-hundredth) and each DJX contract represents $100 times the reduced-value average. Long-term Equity AnticiPation Securities (LEAPS) are long-dated options on the DJIA that expire as far as three years in the future. Currently listed expiries are in December 1998, 1999, and 2000 (symbols: WDJ, VDJ, and LDJ). Further information can be found on the CBOE web site.

DJIA futures trade on the CBOT under symbol DJ. Each contract controls $10 times the average. Settlement is made in cash. Contracts expire within one year on the third Friday of March, June, September, and December. Index futures allow investors to quickly and efficiently adjust aggregate exposure to the Dow. Because of this, insurers might find index futures especially useful in building temporary hedging positions until sufficient funds can be amassed for a permanent hedge.

E-Mini

On September 9, 1997 the Chicago Mercantile Exchange (http://www. cme.com) introduced E-Mini futures and options on the S&P 500 Index. Two key features make E-Minis of interest, particularly to smaller insurers. First, E-Mini futures contracts are obligations to buy or sell the value of the S&P 500 Index at a specific future date. The contracts are valued at $50 times the futures price (that is, about $50,000), thus making them conveniently sized for small investors. Second, E-Minis are processed through an entirely electronic order and execution system (called Globex). This accounts for the "E" in E-Mini. Ultimately, the exchange foresees trading of E-Mini futures and options through the Internet.

Index Funds

Investor interest in indexed funds continues unabated. Investors can now choose from among 172 index funds, up from 147 at the end of 1996. Total assets under management in these funds exceeds $150 billion, with the 66 funds that track the S&P 500 accounting for about two-thirds of this total. Since 1991, the ASM Index 30 no-load mutual fund has tracked the Dow stocks, without the advantage of using the Dow's name. Recently, however, Dow Jones has begun licensing its name to mutual funds (in addition to the Diamonds and futures and options described above). Life and annuity products indexed to the Dow will certainly have compelling attraction to the investing public. While the DJIA and the S&P 500 have historically exhibited a 92% correlation, the S&P 500 outperformed the Dow by 8.5% in 1997.

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