

# **INTRODUCTION TO FINANCIAL DERIVATIVES**

THE FINANCIAL ACCOUNTING STANDARD BOARDS (FASB) HAS ISSUED A FINAL STATEMENT ON THE ACCOUNTING FOR DERIVATIVES AND HEDGING. THE PURPOSE OF THIS STATEMENT IS TO MAKE ACCOUNTING AND REPORTING STANDARDS FOR DERIVATIVE FINANCIAL INSTRUMENTS (HARTMAN 478). THIS PAPER WOULD DISCUSS THE GENERAL IDEA BEHIND THE FINANCIAL DERIVATIVES AND THE DEFINITION OF SOME COMMON TYPES OF FINANCIAL DERIVATIVES. THE IMPACT OF THE FASB STATEMENT HAS MADE TO SOME AREAS IN ACCOUNTING FOR DERIVATIVES WOULD ALSO BE DISCUSSED IN THIS PAPER.

## **WHAT IS A DERIVATIVE?**

A FINANCIAL DERIVATIVE, AS ITS NAME SUGGESTS, IS, "FINANCIAL INSTRUMENTS THAT DERIVE THEIR VALUE FROM SOME OTHER INSTRUMENT OR INDEX" (PERRY 1). IN ADDITION, THE DEFINITION FROM FASB IS, "FORWARDS, FUTURES, SWAPS, OR OPTIONS OR FINANCIAL INSTRUMENT WITH SIMILAR CHARACTERISTICS" (PERRY 2). IN OTHER WORDS, FINANCIAL DERIVATIVES ARE CONTRACTS BETWEEN TWO ENTITIES AND THE ENTITIES INVOLVED AGREE TO AN EXCHANGE. MOSTLY THE EXCHANGE INVOLVES

CASH, BUT IT CAN ALSO INVOLVE A COMMODITY SUCH AS MINERALS, METAL, OR AGRICULTURAL COMMODITIES.

TO UNDERSTAND FINANCIAL DERIVATIVES, ONE NEEDS TO SEE HOW THEY DIFFER FROM FINANCIAL INSTRUMENTS THAT ARE NOT DERIVATIVES. A GOOD EXAMPLE WOULD BE AN U.S. TREASURY BILL. BUYER PAYS A FIXED AMOUNT TO THE GOVERNMENT OR PREVIOUS HOLDER, AND IN RETURN THE BUYER WILL GET THE PRINCIPAL AND INTEREST IN FIXED AMOUNT ON FIXED DATES. ON THE CONTRARY, THE AMOUNT AND THE DATES IN FINANCIAL DERIVATIVES ARE VARIABLE OR AT LEAST PARTLY VARIABLE. SOME COMMON EXAMPLES OF FINANCIAL DERIVATIVES ARE INTEREST RATE SWAPS, EXCHANGE TRADED FUTURE CONTRACTS, AND FINANCIAL OPTION. THEY WILL BE DISCUSSED IN FOLLOWING PARAGRAPHS.

- **INTEREST RATE SWAPS**

INTEREST RATE SWAPS IS, “A CONTRACTUAL AGREEMENT BETWEEN TWO PARTIES TO EXCHANGE INTEREST PAYMENTS ON A SPECIFIC PRINCIPAL OR NOTIONAL AMOUNT FOR A SPECIFIC PERIOD” (PERRY 53). IN THIS METHOD, A PARTY IS INDEBTED TO PAY FOR A FIXED AMOUNT OF CASH, AND THE OTHER PARTY IS OBLIGATED TO PAY A VARIABLE AMOUNT OF CASH BASED ON A

PRICE INDEX. THIS METHOD IS ALSO WELL KNOWN AS “PLAIN VANILLA” (PERRY 53). ANOTHER TYPES OF INTEREST RATE SWAPS ARE “LEVERAGED SWAPS” AND “INDEX-AMORTIZING SWAPS”.

“LEVERAGED SWAPS” ARE INTEREST RATE SWAPS THAT CONTAIN EMBEDDED FEATURES SUCH AS WRITTEN OPTIONS OR LEVERAGE AND MUST BE MARKED-TO-MARKET. ON THE OTHER HAND, “INDEX-AMORTIZING SWAPS” ARE SIMPLY THE COMBINATION OF “LEVERAGED SWAPS” AND “PLAIN VANILLA”. IN THIS METHOD, THE NOTIONAL AMOUNT OR THE PRINCIPAL AMOUNT USED AS A BASE DECREASES OVER TIME.

- **EXCHANGE TRADED FUTURE CONTRACTS**

THE PARTIES TO AN EXCHANGE TRADED FUTURES CONTRACTS AGREE TO TRADE A FIXED AMOUNT OF CASH FOR A SPECIFIED FINANCIAL INSTRUMENT OF A FIXED FUTURE DATE. THE DIFFERENCE BETWEEN THIS METHOD AND THE NON-DERIVATIVE FINANCIAL INSTRUMENTS IS ALTHOUGH THE CASH AMOUNT AND THE DATES ARE FIXED, THE VALUE OF FINANCIAL INSTRUMENT IS VARIABLE BECAUSE IT DEPENDS ON THE MARKET PRICE AS THE DATE OF EXCHANGE.

- **FINANCIAL OPTIONS CONTRACT**

THERE ARE TWO TYPES OF FINANCIAL OPTION CONTRACTS, AND THEY ARE PUTS AND CALLS. IN "PUT" CONTRACT, THE BUYER AGREES TO BUY A SPECIFIED AMOUNT FINANCIAL INSTRUMENT FROM THE SELLER FOR A FIXED PRICE ON A FUTURE DATE. "CALL" CONTRACT REQUIRES THE BUYER TO SELL A DEFINED FINANCIAL INSTRUMENT TO THE SELLER FOR A FIXED PRICE, ON A FUTURE DATE.

### **THE IMPACT OF FASB FINAL STATEMENT**

THE FASB STATEMENT STARTED APPLYING EFFECTIVELY FROM DECEMBER 15, 1998, AND IT APPLIES TO ALL ENTITIES WITHOUT ANY EXCEPTION. IT REQUIRES ALL DERIVATIVES TO BE RECOGNIZED IN THE FINANCIAL STATEMENTS AND TO BE MEASURED AT FAIR VALUE. GAINS AND LOSSES RESULTING FROM CHANGES IN FAIR VALUE WOULD BE RECOGNIZED DEPENDING ON THE USE OF THE DERIVATIVE AND WHETHER IT QUALIFIES FOR HEDGE ACCOUNTING (KOSITZA 2). TO QUALIFY FOR HEDGING ACCOUNTING, THE HEDGING RELATIONSHIP MUST BE HIGHLY EFFECTIVE TO OFFSET CHANGES IN FAIR VALUES OR CASH FLOWS.

INSURANCE CONTRACTS AND REINSURANCE CONTRACTS ARE ALSO INCLUDED IN THE DEFINITION OF A DERIVATIVE, SO THEY ALSO

SHOULD BE REPORTED IN FINANCIAL STATEMENTS. ANOTHER  
CHANGE THAT THE STATEMENT BROUGHT WAS THE TERM  
*DERIVATIVE INSTRUMENT* WOULD BE USED INSTEAD OF *DERIVATIVE  
FINANCIAL INSTRUMENT*.

## WORKS CITED

HARTMAN, BART P., HARPER, ROBERT M., KNOBLETT, JAMES A.,  
AND PHILIP M. RECKERS. INTERMEDIATE ACCOUNTING.  
CINCINNATI: SOUTH-WESTERN COLLEGE PUBLISHING, 1998.

KOSITZA, HARALD. "ACCOUNTING FOR DERIVATIVES." 28 JULY  
1997. ACCOUNTING LEDGER WEBSITE. INTERNET. 28  
APRIL 2000. AVAILABLE:  
[HTTP://WWW.ACCOUNTANTSLEDGER.COM/ACCOUNTING/U  
104AC.HTM](http://www.accountantsledger.com/accounting/u104ac.htm)

PERRY, RAYMOND E., ED. ACCOUNTING FOR DERIVATIVES.  
CHICAGO: IRWIN PROFESSIONAL PUBLISHING, 1997.