Chapter 13
The Effects of Innovative Instruments to Market Participants and the Financial System:
The Particular Role of Information Technologies

Demetres N. Subeniotis
University of Macedonia, Greece

Ioannis A. Tampakoudis
University of Macedonia, Greece

ABSTRACT

Financial innovation triggered new ways in which financial institutions and corporates cope with credit risk since the advent of credit derivatives. A variety of new developed financial instruments, often complex products, offers significant advantages to market participants and its key players and in particular financial institutions. As statistics indicate, advanced computerization is by large the most important factor for the wide use of credit derivatives. More efficient loans portfolio management, further business expansion and confidentiality are the main benefits for banks. In addition, various non financial firms benefit from these tailor-made products. More importantly, credit derivatives are key elements of the financial systems' stability, through increased liquidity, risk reallocation and credit risk pricing. Nevertheless, these innovative products are accompanied by significant considerations on behalf of users and policy makers. Out of which documentation, pricing, regulation and concentration are the central concerns. Market participants and regulators should face the challenges of credit derivatives market so as to boost the trouble-free intensive growth of these instruments.

DOI: 10.4018/978-1-60566-996-0.ch014

INTRODUCTORY OBSERVATIONS

One of the fundamental issues that concern financial institutions and corporates is risk management. A vital component of business risk, among others, is credit risk, since the risk of borrower default can impair the lender's capital structure and trigger similar effects upon the entire organization. Until recently, conventional techniques available to lenders, mainly banks, were loan monitoring and portfolio diversification. However, the expansion of credit and the greater focus on risk management from a number of market participants induced the development of more effective risk transfer markets and instruments, such as syndication, securitization, asset back securities and loan sales.

In overall, the available risk transfer techniques could not meet the needs of the market and, indeed, during the last few years credit risk management experienced a revolution, which primarily generated by the emergence of credit derivatives. The advent of credit derivatives formulated the grounds for increased market efficiency, better risk management and the development of sophisticated financial products. However, these new innovative instruments have raised some concerns due to the robust empirical and theoretical considerations regarding the effectiveness of credit derivatives. Indeed, the market turmoil caused by the collapse of subprime mortgage loans in the USA revived the interest around credit derivatives, since many corporations have been involved in the market through complex products[1].

Although credit derivatives are newly developed financial products, the corresponding market shows an impressive growth in depth, sophistication and diversification and has overtaken previous predictions. Similarly, the increased effectiveness of credit derivatives is confirmed by the number and kind of institutions participating in the market, where the key players are financial institutions like universal and investment banks, securities dealers, insurance companies and investment funds. Nevertheless, the market of credit derivatives has not yet fully matured and it comprises a relative small share of the entire derivatives market, representing a small fraction of the underlying principal value of the global volume of over-the-counter derivatives.

The present paper's overarching objective is to discuss the benefits and effectiveness of credit derivatives from the perspective of financial and non financial institutions. Equally, the effective contribution of credit derivatives to the entire financial system is analyzed. However, the concerns and limitations accompanying the use of these instruments possibly affecting their scope of use are also discussed. Regarding the limitations of credit derivatives, the analysis follows the viewpoint of users and policy makers. More specifically, the paper is structured as follows: the second section presents data for the credit derivatives market and the third section describes the main instruments. In the fourth section the contribution of information technology to the expansion of credit derivatives and more efficient risk management is analyzed. In the fifth section the potential advantages that derive from the application of credit derivatives are examined. In the sixth section, the most important considerations associated with these products are presented. Finally, the section of conclusions highlights the main key points of the paper, while concrete further suggestions are proposed in order to improve the framework of credit derivatives market and increase the efficiency of credit risk transfer techniques.

MARKET STATISTICS

The rapid growth of credit derivatives is confirmed by market statistics, although no single data source provides precise information for the entire market. Credit derivatives are considered over-the-counter products thus the accurate determination of their values outstanding is complicated. Two main sources publish credit derivatives statistics twice a