Financial Market History :
Reflections on the Past for Applied Mathematician today

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Abstract

After World War II, the Bretton Woods Conference designed a new international monetary order, establishing the supremacy of the dollar, while maintaining its indexed on gold. The Bretton Woods system collapsed in 1971, when the US President Nixon removed these US dollar indexation to gold. It opened an era of financial globalization, encouraged by the deregulation not just of currency markets, interest rates but also through rules about banking and investment. But, the considerable risk induced by current price fluctuation resulted in the creation of currency and interest rate financial instruments to hedge against the fluctuations. In 1973, the Chicago Board Options Exchanges (CBOE) is founded and becomes the first marketplace for trading listed options. Since new futures exchanges was founded in different places (in Paris MATIF (1986)) and developed innovative financial hedging instruments. Derivatives make future risks tradable by thinking first in terms of dynamic risk transfer, by using portfolios that have the same payoff as the derivative, with the same time-comovements. New mathematics tools are introduced to optimally design the hedging strategy such that Brownian motion, Itô's formula.
With more than 20 years of training and consulting experience in French derivatives markets, I will try to share some personal thoughts on the relative place of mathematics in market risk management, its use by the regulator .. without forgetting the ethical issues.