Editorial

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Biographical notes: Alexandros E. Milionis is an Assistant Professor in the Department of Statistics and Actuarial-Financial Mathematics at the University of the Aegean. His research interests are in applied time series analysis, applied financial econometrics and environmental statistics. He has published amongst others in *Atmospheric Environment*, *International Journal of Climatology*, *Theoretical and Applied Climatology*, *Meteorological Applications*, *Applied Financial Economics*, *Economic Notes*, *Applied Economics Letters* and *Statistics and Probability Letters*.

The idea behind this issue is to publish the full papers of selected works in the field of financial markets and derivatives presented in the 6th International Applied Financial Economics (AFE) Conference, which took place at the premises of the Research and Training Institute of East Aegean (INEAG) in Samos Island, Greece, 2–4 July 2009. Despite their short history, the AFE Conferences, co-organised by INEAG, the Department of Statistics and Actuarial-Financial Mathematics of the University of the Aegean, the University of Athens and other Academic Institutions, have already gained worldwide reputation and have been established as a forum in which academics, researchers and professional experts in the field of finance from all over the world come together, interact, exchange ideas, and present their research.

The AFE Conference's Scientific Committee tries every effort to bring it to the standard of a highly regarded international conference. It was within this framework that it was considered essential to cooperate with serious international academic journals so that selected works of high quality presented at the conference be published in special issues. The *International Journal of Financial Markets and Derivatives*, Inderscience Publishers, perfectly fulfils these standards and it was with pleasure that the editorial work for this special issue was undertaken, in representation of the Conference's Scientific Committee. All submitted manuscripts related to the field of financial markets and derivatives were sent to two referees who are leading experts in the field. The accepted manuscripts were collected and are presented in this special issue, hoping to provide a useful supplement to those who are interested in the particular field.

In the first paper, Thomaidis, N., Roumpis, E. and Kondakis, N. develop dynamic factor models aiming to predict risk-return relationships in portfolios of stocks. They employ a variety of different models for predicting the conditional factor covariance as well as the full variance-covariance matrix of stock returns. With such models they attempt to elaborate on the well known factor model framework of Fama and French emphasising on the time variation in risk and correlation between stock returns and systematic factors. Optimal allocation strategies are then derived in the framework of

mean-variance portfolio theory. The out-of-sample performance of these mean-variance allocations is assessed.

In the second paper, Doman, M. and Doman, R. examine the dynamics of linkages between stock markets during financial crises, by considering returns of seven national stock indices. Their methodological approach is interesting as they use copulas (also known as 'dependence functions') and a Markov switching regime in order to capture changes in the dependence structure of returns. Their data sets cover the periods January 1995 to December 2000 and January 2005 to March 2009. The first period includes the Asian–Russian crisis and the second period includes the USA crisis. They conclude that crises periods are associated with a significant increase in the return volatility level and the recent US crisis seems to have little impact on the dynamics of the national stock market dependencies.

In the third paper Bianchi, S., De Bellis, I. and Pianese, A. investigate the electricity spot prices traded in three European markets within a fractal framework. Using standard multifractal analysis no clear evidence of a multifractal behaviour in the time series of daily prices is found. However, they provide evidence that a multifractal Brownian motion could model successfully the dynamics of electricity prices.

In the fourth paper, Ruiz-Dotras, E., Bolancé-Losilla, C. and Fontanals-Albiol, H. examine the term structure of interest rates in Germany, France, Spain and Italy for a period of nine years (January 1999 to December 2007), during which a regime of unique interest rate, set by the European Central Bank, existed for all European Monetary Union member states. They employ the so-called three factor model of Nelson-Siegel at weekly intervals and test the null hypothesis of equality in the parameters that define the term structure of interest rates [level, slope (spread) and curvature] in the four countries. They conclude that without the inclusion of Italy the null hypothesis is not rejected. However, when Italy is also considered this is not the case and they attributed the difference in the level and slope which reflects differences in the above countries in inflation and real activity.

The fifth paper authored by J. Witzany has been motivated by a real life cross currency swap between the City of Prague, Czech Republic, and Deutsche Bank AG and its valuation. The author argues that a convexity adjustment model should be used if forward rates are to be used as a proxy for expected value of LIBOR or swap rates in arrears. He further argues that the swap market model is the most suitable for volatility and correlation estimation in an emerging market. He finally concludes that for the particular case study the cross currency swap was inappropriate for the city of Prague interest rate profile and there was a significant risk in terms of the pricing uncertainty.

The last paper by A. Gentzoglanis is of a somewhat different nature as compared to the other five papers of this special issue, as it refers to market regulation. As the author argues, due to the rapidly changing financial landscape the principles-based traditional approaches to the regulation of the securities industry are no longer adequate. He further argues that the so-called Walsh institutional-based regulation model, as it stands, cannot adequately reduce systemic risk and proposes a new regulatory paradigm – regulation by information – as a tool to aid decision making in a changing environment. Under this paradigm, regulators could reduce systemic risk by becoming 'information providers' during the upward movement of the securities and revert back to the traditional regulation during protracted periods of equilibrium.

I am very thankful to the participants who submitted their manuscripts for this special issue, the referees, and Hayette Gartfaui from the AFE Scientific Committee for her kind cooperation. My special thanks to Christos Floros, Editor-in-Chief of the *International Journal of Financial Markets and Derivatives*, for his invitation and cooperation.