Editorial Note "Applied Financial Research". Financial markets - A need for Reflection

José António Filipe

Lisbon University Institute ISCTE-IUL, BRU-IUL, Portugal

jose.filipe@iscte.pt

This number of the IJLTFES - International Journal of Latest Trends in Finance and Economic Sciences is dedicated specifically to Financial Markets and financial issues and to the discussion involving methodologies on the area of "Applied Financial Research".

First of all, we would like to thank on behalf of the IJLTFES, to Prof. Nuno Ferreira (ISCTE-IUL), for his contribution as Guest Editor for this number of the Journal.

After this recognition, it is appropriate to thank also to all the authors for their contributions to this Journal's issue. A specific reference to the authors' work, article by article, will be made in order to get an advanced envision of their contributions in the discussion of these matters on the area under analysis on this issue.

Considering the potential and real effects of the decision making related to this topic, financial markets get central in the global economic system. The global economy is going systematically depending on what happens in financial markets environment. The recent crisis, in course for several years, maintains the global economy in a slow economic growth rhythm. This current situation shows the important of a theoretical discussion and the need of fresh academic approaches in order to get solutions for a new context in the global markets.

Financial markets are nowadays significantly discussed and marked for fast changes on short term trends, which are depending on multiple factors that in current times are very active in the markets, whichever they are, in the area under analysis, i.e. the financial area. Presently, many troubles happen systematically in the markets, demanding for a broad discussion and a large debate in the most different *fora*. The financial markets bases have been questioned by academicians; and politicians are systematically confronted with new facts and they look lost in front of the changing reality resulting from often inadequate measures and mistaken economic politics. Theoretical foundations on finance and mainstream approaches are often away from reality and new paradigms seem to be necessary. In this number, methodologies are presented and a debate around trends and adequacies is explored, with approaches looking for attempts of getting solutions for financial problems and to explain the financial markets as much as proposing information and guidelines for investors and for decision makers in general.

This number first presents the paper "Forecasting the Direction of BIST 100 Returns with Artificial Neural Network Models", by Süleyman Bilgin Kılıç, Semin Paksoy and Tolga Genç. On this paper, Artificial Neural Networks (ANN) models were used to forecast the direction of Borsa Istanbul 100 (BIST100) index returns. The study of these authors combined three ANN models to analyze BIST 100 returns. Weekly time-lagged values of exchange rate returns, gold price returns and interest rate returns were used as inputs to ANN models in the training process. Results of their study showed that BIST100 index returns follow a specific pattern in time. The composite use of ANN models provided to the authors the possibility to demonstrate that there is a valuable information about weekly direction of BIST100 index return given the information of present BIST100 index return, allowing valuable information to the investors although the BIST100 stock market does not demonstrate to be fully informational efficient.

Follows then a study from Rocha, Souza, Santos and Ferreira entitled "Box-Jenkins and Volatility Models for Brazilian 'Selic' Interest and Currency

International Journal of Latest Trends in Finance & Economic Sciences
IJLTFES, E-ISSN: 2047-0916

Rates". The authors use statistical models for the analysis of macroeconomic variables that considered of crucial importance. The authors used these models to describe the behaviour of Brazilian SELIC interest rates and foreign exchange for long periods since the seventies of last century. To accomplish this objective Rocha et al used the Box-Jenkins methodology. They analyzed the residues that showed the presence of heteroscedasticity. A joint model was used to estimate the mean process by an ARIMA and the conditional variance by ARCH, GARCH, TARCH, EGARCH models. The results showed SELIC interest rate series. Evidence was shown that there is asymmetry in the variables, yet there was a leverage effect. In addition, the volatility of these series in the context of Brazilian economic scenario reveled the face of external and internal crises in the examined periods. So, the fitted models effectively captured the Brazilian economic behaviour during the period comprehended from 80´s to 90´s showing the mid degree of persistence of shocks like bad and good news, aiding to understand the performance of these variables providing decision-making to managers, to act in long and short term. The authors conclude also that either internal or external economic crises affect the conduct of Brazilian monetary and fiscal policy and may alter the expectations of other economic agents.

Follows a paper from Pinto and Borges "The Banking Crisis of 2007-2008, and Contemporary Responses", discussing the recent banking crisis initiated in 2007, the strong impact in the economic activity and the responses needed at several levels to face all the impacts. The authors finish their paper by saying that "… what the financial crisis of 2007-2008 showed us all, is that we do need different rules to promote financial stability, than those we had under Basel II", what shows the importance of the regulation and its impact on the financial system stability as much as its importance on the economic activity as a whole.

By its turn, the paper "Modeling long memory in the EU stock market: Evidence from the STOXX 50 returns", by Bentes and Ferreira, shows the importance of modeling long memory in stock markets in order to get conclusions on this kind of analysis. The authors show that the FIGARCH model is the best model to capture linear dependence in the conditional variance of the STOXX 50 returns as given by the information criteria. Their paper analyzes whether the STOXX 50 returns exhibit persistence in the conditional variance equation. They estimated the GARCH, IGARCH and FIGARCH models based on a data set comprising the daily returns for the period from January 5th, 1987 to December 27th, 2013. Their results confirmed that the long-memory in the volatility returns constitutes an intrinsic and empirically significant characteristic of the data. At the practical level, the authors compared their results with the ones of previous studies and showed that they were in consonance with the evidence showed by them on this subject.

The paper "PSI-20 Portfolio Efficiency Analysis with SFA", by Ferreira, Souza and Souza, investigates the technical efficiency of the individual companies and their respective groups of the Portuguese stock market. In order to get results from the study, the authors combined the input variables "market value and return" with exogenous variables such as "interest income", "depreciation", "cost of goods", "employees" or "net sales" in a Stochastic Frontier Analysis Model. The technical efficiency of the PSI-20 enterprises index was estimated by getting the factors which influence efficiency variability, applying the SFA approach main improvement which lies in its potential to categorize between measurement error and systematic inefficiencies in the estimation process. The results revealed that the technical efficiency is higher for the enterprises placed in the industry, construction and distribution economic sectors whereas the commercial banking sector has the lowest technical efficiency scores. The "employees" and "depreciation" variables were the elements that most enhance to the stock market inefficiency.

The last paper on this issue is a Book Review by Ferreira, M. A. M.. It is appropriate to mention that IJLTFES has been chosen for some book reviews in which the main summarized conclusions of the reviewed books are highlighted. The book "Network Models in Economics and Finance", 978-3-319-09683-4, vol. 100 is a volume from Springer Series "Springer Optimization and Its Applications". Valery A. Kalyagin, Panos M. Pardalos, Themistocles M. Rassias are the Editors of this book which - as the editors refer and as cited in this paper by Ferreira - contains new tools for financial data mining and offers a discussion about the uncertainty of the network market analysis; provides as well a network analysis to the financial crises; includes methods of network analysis applied to corporate governance and investment tools. The author of this review mentions the broad range of the subjects dealt with in the reviewed book and also on the analytical tools used and described. According to Ferreira, the subjects that are a substantial part of this book are devoted to the Financial Markets which are very determinant to the World Economy. In short, Ferreira concludes that

this is a book of indispensable reading for senior and beginner researchers and professionals in economics, financial management and network analysis.

The papers published on this issue show the importance of analyzing the financial markets and offer a contribution for a better understanding of multiple situations in which modeling permits the analysis of trends and the behavior of agents. The agents' decisions on this area have determinant effects on the economic system as a whole and their analysis reveals to be considered essential for the correct planning of individual activities of agents on this context and a correct understanding of the markets as a whole. Although many different branches of science develop studies in this area to better understand the human financial decision making processes, the models presented in this number make a strong contribution for the understanding of financial markets and agents decisions on these markets as much as for the financial markets' modeling, itself.