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Editorial
Special Issue of the International Journal of Finance and Economics
Innovations in Finance, Economics, Risk Management & Policy

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This special issue comprises a selection of papers covering a broad range of finance topics from the 4th Symposium on Quantitative Finance and Risk Analysis (QFRA) held in June 2018 at the island of Mykonos in Greece.

Two papers in this special edition look at the information content of options' prices. Measuring Value at Risk (VaR) and Conditional Value at Risk (CVaR) using statistical methods such as ARCH and GARCH is well established. A key limitation of such methods is the backward-looking nature of this "statistical approach" and the fact that the most recent values of the variables are not given much weight in forecasting future values. The paper by Barone-Adesi, Legnazzi and Sala (Option-implied risk measures: An empirical examination on the S&P500 index) uses data from index options to extract forward-looking measures of volatility for use in VaR calculations. The authors' back-test their VaR forecasts using statistical approaches and the "option-implied" approach (on the S&P500 index), but do not find huge differences between them. However, the option-implied approach is simple to implement and is found to be at least as accurate as the more complex statistical approach. Therefore, the implied-options approach might be a useful complement to existing statistical methods for internal and external validation of VaR forecasts.

The information in options data is also used in the paper by Voukelatos and Verousis (Option-implied information and stock herding) to examine herding behaviour in equity markets. The novel approach in this paper is to link herding in the US equity market (daily data, January 1996–December 2015) with information from the options market, such as (index) implied volatility, implied volatility skew, and implied volatility spreads. Using data on a cross-section of US stocks, herding is found to be stronger during periods of market stress.

The next set of four papers cover the key areas of portfolio allocation, IPOs, mergers and acquisitions, and the determinants of changes in bond prices. The mean-variance approach to portfolio allocation in its basic form has well-known practical drawbacks, namely the sensitivity of optimal weights to poor forecasts of the inputs such as mean returns and second moments. The paper by Zhao, Stasinakis, Sermpinis and Da Silva Fernandes (Revisiting Fama-French factors' predictability with Bayesian modelling and copula-based portfolio optimization) attempts to remedy such defects. They take the five Fama-French US (style) factors as their basic return inputs and undertake a three-stage optimisation procedure. First, they use several linear and non-linear models to forecast expected returns, which are then combined using a Bayesian shrinkage approach and back-tested to ascertain their forecasting accuracy. Second, they use an asymmetric copula model to forecast the second moments of the factors. Finally, the optimal asset weights are determined using both the mean-variance approach and the mean-variance CVaR criteria. The performance metrics used to assess success include the Sharpe and Sortino ratios and maximum drawdown. They find, in the out-of-sample period 2000–2017 using monthly data, that their three-stage optimisation approach performs well in comparison to other previously used methods, such as forecasting returns using a random walk or the $1/N$-portfolio approach.

The paper by Sermpinis, Tsoukas and Zhang (What influences a bank's decision to go public?) looks at the determinants of IPOs using US data over the period 1996 to 2016. The candidate variables to help predict IPOs consist of bank-specific variables, such as size, profitability, capital-assets ratio and leverage, as well as macroeconomic variables, such as interest rates and GDP growth. Several candidate models, including the Cox proportional hazard, discrete hazard and logistic models are analyzed. But the methodological innovation is the application of a "least absolute shrinkage and selection operator" (LASSO) regression approach, allowing general-to-specific modelling of the many candidate independent variables, by forcing some coefficients of these variables to zero and shrinking others. The authors find that this considerably helps improve the ability of the model to forecast future IPOs.

The determinants and relative success, or otherwise, of Mergers & Acquisitions (M&A) has been widely studied using the Cumulative Abnormal Return (CAR) as a measure of performance. The paper by Huang, Zhang, Goyal and Laws (Internal capital market mergers in a weak external market environment: An emerging market evidence) uses a regulatory change in the split-share structure for Chinese firms to examine the success of this "exogenous shock" on different types of M&A. In 2005, the split-share structural reform (SSSR) in China granted trading rights to state-owned shares of listed state-owned-enterprises (SOEs). In the period after this reform, there is a greater incentive for shareholders to scrutinize the activities of prospective M&A targets. In addition, firms that could be described as "related-party" might have superior information on the success of prospective M&A targets. Based on deal announcement CARs, the authors find that gains from mergers did improve after the 2005 split-share reform and that related-party M&A had higher gains than non-related-party M&A, demonstrating the importance of internal capital markets in helping facilitate the success of M&A in China.

The paper by Kontonikas, Nolan, Zekaite and Lamla (Treasuries variance decomposition and the impact of monetary policy) decomposes unexpected one-period excess bond returns into changes which are due to revisions to expectations of future inflation ("inflation news"), revisions to future real interest rates ("real interest rate news"), and revisions to future excess bond returns ("bond risk premium news"). The time-series properties of key variables, such as the change in short-term interest rates, the long-short spread, and the real interest rate, are represented by a VAR model. The VAR regression parameters can then be used to decompose changes in unexpected one-period bond returns into contributions which are due to inflation news, risk premium news, and real interest rate news. The novelty of this paper is the inclusion of two measures of monetary policy shocks, namely, the surprise in the change in the federal funds rate ("conventional monetary policy") and the change in the monetary base ("non-conventional monetary policy"). They find that unconventional monetary easing in the

US has a positive effect on Treasury bond returns, which is mainly due to a downward revision to inflation expectations, and this effect is felt most strongly in the financial crisis of 2008.

The interconnectedness of markets and the impact on systemic risk became of continuously increasing importance after the 2008 crisis. The paper by Bardoscia, Bianconi and Ferrara (Multiple network analysis of the UK OTC derivatives market) applies a network analysis to UK interest rate, credit and foreign exchange, OTC derivatives markets. They extend the network approach and are able to model the interactions among these three large derivatives markets simultaneously in a multiplex network. They then examine how shocks to variation margin payments propagate through the system and find that, where liquidity buffers are small, a few institutions may pass liquidity stress to counterparties and around 0.5% to 1% of institutions contribute to aggregate liquidity deficiencies.