Editorial

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Many exciting economic developments have occurred in Latin America countries during recent decades. In many of them, the adoption of market-oriented policies, including the deregulation of important productive sectors and the opening to international trade has promoted significant economic modernisation, increased per capita income levels, created new employment opportunities and improved income redistribution. The endemic financial crises episodes that were present in the region during the last two decades of the 20th century as a consequence of deficiently designed macroeconomic policies and external shocks, were almost inexistent during the first decade of the 21st century. Furthermore, most Latin American countries were not affected neither by the 2007–2009 financial crisis that originated in the subprime mortgages industry of the USA, nor by its sequel, the 2010–2012 European Sovereign Debt Crisis, that required the bailout of Greece, Portugal, Ireland and Spain. That is a significant fact, because it highlights the resilience the region's economies had achieved at that time. The multiple economic reforms implemented by Latin American governments during the previous 15 years proved their worth as they worked well and isolated most of the region's countries from the exacerbated turbulence that shook international financial markets during the difficult years of the financial crisis and the sovereign debt crisis.

Within that context, the role played by rapidly maturing domestic financial markets, institutions and regulations was crucial for stability. Some of the most important developments included, for example, the transition of foreign currency markets from previously fixed or government managed exchange rates, to freely floating, market determined exchange rates, which gave local financial markets and agents better opportunities to hedge their risks; or, the enhanced role of the stock and bond markets as sources of funding for local firms and governments, and the creation, growth and fast consolidation of domestic derivatives markets, which complemented financial markets stabilising mechanisms.

Considering the lasting consequences that derived from it, one of the most transcendental structural reforms that took place in the region during the last decades of the 20th century was the transformation of the traditional 'pay-as-you-go' government managed retirement pensions system, into a privately-run, individual-accumulation retirement accounts pension system. Originally introduced in Chile during the early 1980s, this innovative model was soon replicated in many other Latin American countries (Argentina, Peru, Colombia and Mexico, among the largest economies in the region) because, in addition to tackling with a growing public finance imbalance frontally, as the demographic pyramid inverted due to a population growth slow down, it also significantly augmented internal savings, resulted in the sophistication of arm's-length markets, and funded important infrastructure investments.

Lastly, the banking system of several Latin American countries was significantly strengthened by the arrival of multinational institutions (mostly Spanish, US and Canadian) that introduced modern information systems and advanced management techniques creating a new environment, favourable to the introduction of new financial products and services, and to an increasing participation of the financial industry in the economy.

The presence of two of the most promising emerging markets due to their population size and degree of industrialisation (Brazil and Mexico), as well as several rapidly modernising market-oriented national economies (Colombia, Peru, Chile, Argentina) make of Latin America a pole of attraction for direct and indirect investment, and the home of an increasing number of large multinational companies. As part of that fast modernisation process, the rapidly growing sophistication of these countries' financial industry attracts the attention of investors and analysts, and demands an increased study effort from academic researchers.

In this special number of the *International Journal of Bonds and Derivatives* we present a collection of five current empirical papers on different aspects of the bonds and derivatives in Latin America. The first paper, entitled 'Currency exchange rate risk hedging strategies using MXN/USD MexDer futures contracts', authored by Roberto J. Santillán-Salgado, Melissa G. Ulín-Lastra and Francisco López-Herrera, explores different hedging strategies from the perspective of a domestic agent holding a long position in USD, by using the MXN/USD futures contracts traded in the MexDer, Mexico's derivatives market. Comparing a number of time-varying bivariate GARCH-based hedging strategies with a naïve and a fixed hedge ratio obtained from historical variance and covariance measures, these authors conclude that the fixed hedge ratio strategy performs better than the rest of the alternatives in terms of portfolio volatility reduction.

The second paper, whose title is 'Mexican REITs (FIBRAS) in retirement funds (AFORES): different pricing approaches and market risk measurement implications', by Salvador Cruz-Aké, Reyna Susana García-Ruiz, and Francisco Venegas-Martínez, develops a methodological proposal to price a hybrid instrument, the FIBRAS, traded in the Mexican financial market, which is a variation of the real estate investment trusts (REITs) traded in the USA. The authors explore different valuation alternatives; first, they assume that the FIBRA is a structured instrument consisting of a risky bond and an attached option on the value of a Mexican construction firm. Next, they use current data from FIBRA UNO (the largest Mexican FIBRA) as a source of uncertainty. Their third proposal consists in using an implicit net asset value (NAV) approach for FIBRA UNO. Finally, they assume that the FIBRAs' market prices behave like small-caps prices, with relatively low betas, as frequently discussed in the REITs literature. They conclude that the FIBRA UNO is a security whose peculiarities make it hard to value and, because of that reason, its risk may not be correctly estimated. Therefore, it should not be included in retirement funds portfolios. The diversity of valuation methodologies reviewed gives a clue on the existing difficulties related to its valuation.

The third contribution, entitled 'Spatial valuation of annuity derivatives', co-authored by Gabriel Alberto Agudelo Torres, Luis Ceferino Franco Arbeláez, and Luis Eduardo Franco Ceballos, considers the possible spatial interactions among the probabilities of individuals dying at certain age on particular regions, in the valuation process of a financial derivative whose underlying variable is an annuity. The proposed methodology is empirically applied to an Argentinean case, constructing mortality tables that incorporate implied spatial correlations, and evaluate their effects on the price of the derivatives.

In the fourth paper, 'Futures contract implementation and the impact on commodity spot price volatility: evidence from Latin America', Osmar H. Zavaleta-Vázquez and Laura Arenas report the results of their study on the impact of the introduction of futures contracts on the underlying commodity price returns' volatility. To that end, they use data on the futures contracts for agricultural commodities traded in the three largest derivatives markets in Latin America: Argentina, Brazil and Mexico. Zavaleta-Vázquez and Arenas evaluate the potential reduction in the volatility of commodities prices and its possible economic implications for public policy. In order to model the stochastic dynamics of the time series, they estimate univariate ARMA structures of the logarithmic returns, and model GARCH processes to measure the impact attributable to the introduction of futures contracts on the underlying commodity price return volatility. Their analysis results show that in three out of six commodities studied, there was a statistically significant decrease in spot price return volatility once the corresponding futures contracts were introduced in the market. They conclude that their findings could be relevant to explore the convenience of implementing futures markets for other agricultural products, given the importance they have for the economic well-being of the population.

The last paper of this special issue, entitled 'The integration of Latin American bond markets: a copula analysis approach (1999–2015)', by Edgar Ortiz, Francisco López-Herrera, Roberto J. Santillán-Salgado and Alejandro Fonseca-Ramírez, examines government bonds markets, represented by the emerging market bond index (EMBI) returns of six Latin American countries: Argentina, Brazil, Chile, Colombia, Mexico and Peru. Using a bivariate copula approach that identifies the importance of that relationship by pairs of markets, these authors report empirical evidence that shows that the integration process among Latin American countries bond's markets remains partially incomplete. These results suggest that there are good opportunities to take advantage of diversification for investors' portfolios. For regional multinational corporations, market segmentation of bond markets, implies less liquidity and efficiency of domestic bond's market, suggesting they can probably do best considering other financial centres and markets to fund their long term needs.

All the papers included in this special issue on Latin American financial markets are characterised by a rigorous methodological approach, to elucidate problems in valuation, hedging and integration, with current data and insightful analyses. The researchers who participated in this effort are specialists in their respective fields and aim to contribute to a better understanding of Latin America's rapidly changing financial scope. We hope that the reader will enjoy these contributions and discover, along some of the most exciting developments that are taking place in the region, the immense potential opportunities open to the thriving expansion of Latin American finance.