

RISK MANAGEMENT IN EMERGING MARKETS

Issues, Framework, and Modeling

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Preface

Academic finance research has shown that emerging markets still suffer from a myriad of risks such as credit, operational, market, legal, and exchange rate risks. The onset of the recent global financial crisis of 2007–2008 as well as the public debt crisis in the Eurozone has brought to the light a number of emerging markets facing tumbling currencies, rising inflation, slowing growth, heavy dependence on foreign capital, and high levels of vulnerability to external shocks due to increased market integration. The long swings in crude oil markets since June 2014 — which particularly arises from the complex geopolitical situations in the Middle East, low demand, and weak growth expectations — have been discouraging corporate investments, reducing corporate earnings, and consequently causing the plunge of stock markets around the world.

This context thus calls for not only a reconsideration of recent risk assessment models and risk management practices but also the improvement and innovation of these models and practices. Factors such as liquidity, tail dependence, comovement, contagion, and timescale interactions would definitively have to be part of an integrated risk assessment and management framework.

This book, composed of 21 high-quality exclusive chapters, provides insights into three main dimensions of risk management in emerging markets: (i) the state of the art and the effectiveness of risk management practices; (ii) current issues and challenges in risk assessment and modeling in emerging market countries;

(iii) the responses of emerging markets to the recent financial crises and the design of risk management models. Chapters are grouped into three parts. Part I proposes the general and integrated framework for risk management. Part II suggests suitable risk management applications for concrete cases. Part III discusses and sheds light on some future challenges, in terms of risk assessment and regulatory frameworks, facing risk managers, regulators, and policymakers.

Sabri Boubaker
Bonnie Buchanan
Duc Khuong Nguyen
Editors

Foreword

In the period immediately following the Global Financial Crisis (GFC) of 2007–2008, capital flows into emerging markets surged, as stock market investors chased returns of a staggering 79.02% in 2009 and 19.20% subsequently in 2010. Developed stock market returns during the same period, while certainly attractive at 30.78% and 12.34% respectively, seemed simply inadequate in comparison. The “risk-on” appetite of investors appeared insatiable in both equity and bond markets, with the latter seeing a significant narrowing in credit spreads. Since, then it has been quite a different story: emerging equity markets have declined approximately 18.23% in US dollar terms and much the same in local terms, while developed markets have risen more than 44.07%.¹

The apparent weakness and subsequent underperformance of emerging versus developed stock and bond markets has become a common/frequent discussion point in the popular press. The obvious culprit was the withdrawal of excessive post-GFC stimulus and weaker demand internationally. Deflationary pressures persist now with the equally significant fall in the price of oil. Increased levels of financial market volatility appear to characterize all markets, with particular concern expressed over the worldwide impact of declines in the economic performance of China.

1. Based on analysis of MSCI indices returns. Please see: https://www.msci.com/resources/factsheets/index_fact_sheet/msci-world-index.pdf

It is in this broad context that the timely volume “Risk Management in Emerging Markets: Issues, Framework, and Modeling,” edited by Sabri Boubaker, Bonnie Buchanan, and Duc Khuong Nguyen must be considered. The volume is broadly divided into three main parts with many excellent and carefully selected essays (chapters) contained within each that reflect the recent interest in managing risk — broadly defined — associated with investment in emerging markets. The first part consists of nine chapters that provide a framework for analyzing emerging market risk; the second consists of eleven chapters that address applications and case studies; while the third and final part contains four chapters that provide insights into mostly regulatory developments that are necessary to address the risk concerns addressed in earlier chapters, but with a particular focus on developments in banking markets. The contents of these chapters will now be briefly explained.

The first part begins with the analysis by Emawtee Bissoondoyal-Bheenick, Robert Brooks, Sirimon Treepongkaruna and Marvin Wee on realized exchange rate volatility and finds that increases in currency risks are associated with the variability of liquidity. Daniela M. Salvioni, Francesca Gennari and Luisa Bosetti then investigate the relationship between ethics, risks of compliance and find that a shared background of ethical principles is required to prevent the risk of compliance failure and limit the global risk exposure of a company. The chapter by Jan Novotný and Mayank Gupta then investigates the cross-sectional aspects of the dynamics of the valuation metrics across global stock markets including both developed and emerging markets, with their model providing early warning signs for asset mispricing in real time on a global scale and formation of asset bubbles.

This theme is then continued with a chapter by John R. Anchor and Hana Benešová that provides a new approach to political risk assessment in emerging markets, while Mariya Gubareva and Maria Rosa Borges reassess the economics of interest rate risk management in light of the global financial crisis by developing a derivative-based integrated treatment of interest rate and credit risk interrelation. Denis Davydov and Steve Swidler then

undertake a forensic approach to audit the quality of accounting information reported by banks in emerging market countries, since the lack of financial standards and reporting transparency can ultimately lead to bank failures in many emerging nations. The chapter by Ehab Yamani identifies three crisis warning indicators driven from trading in emerging markets' carry trades, and determines if this allows the prediction of two major financial crises: The 1997–1998 Asian Crisis and the 2007–2008 GFC. The chapter by Mahfod Aldoseri and Andrew C. Worthington reviews the risks that Islamic financial institutions face in an emerging market context, including risk sharing in Islamic financing and Shari'ah (Islamic law) compliance. The final chapter in this part by Mazin A. M. Al Janabi then examines asset liquidity risk and obtains a Liquidity-Adjusted Value at Risk estimation for various equity portfolios.

The second part focuses on applications and provides insights from a series of case studies. The first chapter in this part is the work by Francesca Battaglia, Franco Fiordelisi and Ornella Ricci, who investigate enterprise risk management and bank performance in the context of Eastern Europe during the financial crisis. The next chapter by Haoshen Hu and Jörg Prokop assesses the market impact of credit rating changes in emerging stock markets by a group of six Chinese credit rating agencies and show that market reactions to rating signals are largely in line with observed behavior in Western stock markets.

The case study theme continues with Yajing Liu, Kenya Fujiwara, Toshiki Jinushi and Nobuyoshi Yamori investigating how relationship banking facilitates the management of funding risks in China, while Franco Parisi, Sherwood Clements and Edinson Cornejo assess risk management practice in the transitional economy of Chile. The study by Takashi Matsuki, Kimiko Sugimoto and Yushi Yoshida then considers the changing nature of regional integration and the implications for risk management of various African stock markets, while Zoltán Schepp and Mónika Mátrai-Pitz explore the interesting case of foreign currency borrowing in Hungary, which was used to fund housing loans. A. Can Inci then uses 5-minute (and 15-minute) intervals

Borsa Istanbul Stock Exchange data to undertake a microstructure analysis, while the final chapter in this part by Roland Füss, Dieter G. Kaiser and Felix Schindler determines whether diversification benefits accrue from adding emerging market hedge funds (EMHFs) to an emerging market bond/equity portfolio.

The final part in the volume “Looking Ahead” to expected developments, particularly with respect to banking markets. The first chapter in this part by Jocelyn Grira and Chiraz Labidi discusses the regulatory challenges that are faced by financial institutions in emerging countries, highlighting their idiosyncratic features compared with those in developed countries. The next chapter by Hanh Thi My Phan and Kevin Daly considers market concentration and bank competition in several emerging Asian countries and finds that there is generally a negative association between market concentration and bank competition. This is consistent with banks in concentrated markets colluding to generate higher profits. Alberto Burchi and Duccio Martelli then consider the possible unintended consequences of Basel III on emerging and developing economies and employ a Stressed Value at Risk (SVaR) to measure these effects. The final chapter in this volume is by Elmas Yaldöz Hanedar and Avni Önder Hanedar, who assess the financial constraints that small and medium size enterprises have experienced in emerging economies following the GFC demonstrating these effects are most significant on small- and medium-sized firms.

Overall, this excellent collection of essays provides key insights into the behavior of emerging financial markets and the risk associated with them.

Jonathan A. Batten