

A Cointegration Approach to Estimating Emerging Market Debt Spreads

Edward Sun *

BEM Management School Bordeaux, France

&

School of Economics and Business Engineering

Karlsruhe Institute of Technology (KIT), Germany

Daniel Tenengauzer, Ali Bastani

Bank of America Merrill Lynch New York, USA

Omid Rezania, Bashar Zakaria

California Public Employees Retirement System Sacramento, USA

Abstract

The bond spread over a risk-free asset implied by market prices constitutes a premium for holding defaultable instruments. This premium depends on the intrinsic risk of the credit, which in the case of sovereign bonds, is a function of the economic conditions in each country as well as the global backdrop. We present a model that econometrically estimates fair values for external debt based on economic fundamentals focusing on the bond spreads for twelve countries in the emerging markets CDS index (CDX). We apply the cointegration method to identify the relationship between spreads and more structural macroeconomic variables, i.e., the real GDP, the real effective exchange rate (REER), and the global investors' risk aversion. We also investigate the evolution of two additional variables (commodity prices and US interest rates) to establish the short-term deviations of spreads from equilibrium via an error correction model. We report our significant findings.

Key Words: Bond spread, Cointegration, Emerging market CDS, Sovereign bond

JEL Classification: E44, F34, G11

*Corresponding author. Prof. Dr. Edward Sun, BEM Management School Bordeaux, 680 cours de la Libération, 33405 Talence Cedex, France. Email: edward.sun@bem.edu. The authors thank the support from Bank of America Merrill Lynch New York.