The Effects of Contagion during the Global Financial Crisis in Government-Regulated and Sponsored Assets in Emerging Markets

A thesis submitted for the degree of
Doctor of Philosophy

by

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in

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CERTIFICATE OF AUTHORSHIP/ORIGINALITY

I certify that the work in this thesis has not previously been submitted for a degree nor has it been submitted as part of requirements for a degree except as fully acknowledged within the text.

I also certify that the thesis has been written by me. Any help that I have received in my research work and the preparation of the thesis itself has been acknowledged. In addition, I certify that all information sources and literature used are indicated in the thesis.

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Abstract

The effects of financial contagion during the Global Financial Crisis (GFC) have been extensively studied in the finance literature. One of the key issues is the devastating effect of the crisis on wealth and asset prices. However, an important difference between this crisis and past crises was the relatively small and short duration of the effects of the crisis on emerging markets. Of particular interest was the resilience of government-regulated and -sponsored assets such as pension funds, state-owned enterprises, and international and local-currency government bonds. This thesis contributes to the literature on the effects of financial contagion by analysing four cases of government-regulated and -sponsored assets during different episodes of the GFC. The second chapter analyses contagion from US equity markets to emerging-market autarchic assets (Colombian private pension funds) during different episodes of the GFC. In this paper we test for contagion via changes in correlation between financial asset returns and via additional volatility spillovers. We propose a DCC-GJR GARCH framework where the S&P 500 is the source of transmission of contagion to the autarchic asset. We find no evidence of contagion measured as significant changes in correlation during the first two phases of the crises. In Chapter 3 we extend our analysis to government-sponsored assets (state-owned enterprises (SOEs)) and argue that these assets account for a substantial and increasing fraction of global foreign direct investment. While emerging-economy SOEs are often vehicles for state-directed economic growth policy, the performance of SOEs compared with private enterprises is an open question, particularly during crisis periods. We estimate a four-factor model of SOE returns of the BRIC economies for the period 2000–12 and show that certain SOEs offered some protection to investors during the financial crisis of 2007–09. We use quantile regressions since this approach is robust to the presence of outliers and their impact on the

factors during crisis periods. The results obtained in this chapter provide empirical evidence for the special role of the state in protecting and stabilising state-owned enterprises. In Chapter 4 we analyse the effects of the GFC on government bonds. For this objective we use propensity matching estimation to measure the effect of the GFC on sovereign spreads using data from 43 countries. We estimate general underlying factor models allowing for multiple channels of contagion transmission then use estimates to select matching non-crisis benchmarks for nine portfolios of sovereign bonds. We found no significant changes in spreads on portfolios of local-currency emerging-market debt during the GFC. Finally, in Chapter 5 we use high-frequency Colombian government bond data and perform an event study on high-frequency data to measure the effect of the news originating from the GFC via a market-transmission mechanism. In order to avoid confounding effects, we compare the impact of news originating from the GFC with global, regional, and local news. Our results make an interesting contribution to understanding the extent of the resilience of emerging markets under the postulates of the coupling/decoupling hypothesis and market integration.

Keywords: emerging markets, global financial crisis, regulation, stated-owned enterprises, pension funds, government bonds.

JEL classification: C5, G1, G2, G14, G15, G28, G38

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