Did the financial crisis create arbitrage opportunities and could they be exploited? Evidence from the Canadian dually-listed stocks

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Dually listed stocks have generated a lot of research interest in recent years. Most of the research is concentrated in the areas of price discovery and return benefits from cross-listing. Little attention has been paid, however, to the behavior of dually listed stocks during financial turmoil. Furthermore, the majority of the analyses involving dually listed equity concentrate on the price series converted into the same currency, therefore ignoring the effects exchange rate changes may have on the prices. To address these issues, I analyze the behavior of the difference between the prices of 54 Canadian stocks dually listed on Toronto and New York stock exchanges during the Financial Crisis of 2008. By implementing cointegration analysis and the error correction model I find that price differential disappears over time (Law of One Price holds in the long run), even through a period of significant instability. However, the time it takes for the deviations from parity due to exchange rate shocks to disappear is significantly longer compared to periods of relative stability, with half-lives ranging from 0.5 days to 31 days. These results imply that significant arbitrage opportunities may exist during the crises.

What may explain this phenomenon? Are the markets inefficient in times of crisis, or are there other factors? The cross-sectional results of the error correction term show that the time of reversion to parity is negatively affected by the trading volume and market capitalization of the stock, while the industry and the time the stock has been listed in the United States are insignificant. These results suggest the liquidity constraints associated with the 2008 Financial Crisis may have prevented arbitrageurs to take advantage of an arbitrage opportunity, even though such were present during the Financial Crisis.