

An Empirical Study of Risk-less Arbitrage Transaction Model on Convertible Bonds in Taiwan.

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ABSTRACT

Enterprises in Taiwan have taken Convertible Bonds as a way to collect money for over ten years. However, most of the investors in the stock market still have few understanding about the transaction and investment value of Convertible Bonds. Regarding there are plenty of financial commodities for investors to choose and it is an era of less rate of return on investment, the character which is the hybrid of equity and bond of Convertible Bonds will be a brand new alternative for investors to select but not stocks or bonds only. In this paper I had researched and collected 298 listed and over the counter convertible bonds and then analyzed the static arbitrage frequency of convertible bond and the possibility and margin of making profits to see if it is worthy to involve in this market. This is the first empirical study in Taiwan that it was broadly and overall analyzed the arbitrage of convertible bonds and calculated the rate of return. I held on a serious attitude when researching and working step by step. First of all, I built up a static arbitrage model. Then I collected the data of arbitrage cost. Secondly, I surveyed and utilized the daily transaction data of convertible bonds of recent three years, in order to determine the possibility of static arbitrage by the arbitrage formula and figure out the related rate of return of arbitrage. Finally, I adopted the Judgment Sampling Approach to pick up the most remarkable case as the empirical example of static and dynamic arbitrage and interpret the implication of this case. I had discovered 25 research results from the related literature reviewing, empirical analyzing and case studying. I summarized them in the following 7 conclusions and tried to recommend the government organization, investors and later researchers as below, A.Conclusions 1.If we can take the advantage of the character of convertible bonds that possesses the quality of equity and bond and control and manage the non-system risks seriously, convertible bond market could be a risk-less arbitrage paradise for investors. 2.There are high hedge, less information communication and low efficiency of the new China asset market. The convertible bond arbitrage operation still has a lot of improving space in China. 3.There are only 7% of the 298 convertible bonds in Taiwan totally without any static arbitrage opportunity. Thus, the existence of the arbitrage chance of convertible bond is for sure. However, we can also understand that the market efficiency of price linkage is inferior and the debt credit problem will influence the investment evaluation about convertible bonds. 4.There were plenty of arbitrage and respectful rate of return of the static convertible bonds in Taiwan in the last four years. Especially the frequency of the put arbitrage opportunity and rate of return are high than conversion arbitrage. 5.Concerning the control and management the shortselling risk, the empirical arbitrageurs often avoid from the shareholder's regular meetings every March to May and before the ex-right date every June to September. It makes that even though the conversion arbitrage opportunity is a lot but it's hard to operate, however, put arbitrage doesn't have this kind of matter. 6.Despite the stock market is a bear market, then there are still some suitable arbitrage opportunities. If we can collocate with a bull market and ex-right with convertible bonds, it's even a perfect circumstance for operation. 7.If we can skillfully apply the variables of favorable clauses and trading characters of the convertible bonds, the waving stock prices and the short of stock market chances, there will be some assorted and risk-less arbitrage methods which are worthy for professional arbitrageurs to learn and utilize.

Keywords : Convertible Bonds, Risk-less Arbitrage, Static Arbitrage, Dynamic Arbitrage, Transaction Model

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