

Chapter 5: SUMMARY AND RECOMMENDATIONS

5.1 Overall View

Investment in CPO futures is a relatively new idea for investors especially in Malaysia. Currently, this futures market is used extensively by hedgers, traders and speculators. The high leverage and physical settlement method made it quite difficult for the market to be used for investment. Nevertheless, as a commodity based asset, CPO futures is an asset worth to be analysed further in terms of its investment as a stand-alone and part of a portfolio. This is due to the fact that an agricultural commodity-based asset, such as CPO futures, in most cases, its prices rises and falls depend more on factors such as near term supply and demand and weather (Loh, 2003).

5.2 Risk and Return Characteristics of Assets

In-depth analysis of the risk and return characteristics of the three assets under study is done for the time periods starting from February 1994 to February 2001. The time period is chosen to include the period of the Financial Crisis. In relation to this, the time period is broken into two equal halves: February 1994 – July 1997 and August – February 2001. All the three assets post low mean returns during all time periods. As expected, KLCI records the highest risk during the period of the study. This may largely due to the crisis. KLCI, a measure of stock market performance, is badly affected by the Financial Crisis. However, among the there assets, BOND shows some stability in its performance. It registers a considerably low risk during the study period. As for CPO futures, it outperforms KLCI during the period of the study. It generates a slightly better return and incurs less risk. This situation is somewhat interesting. It could signal to investors that there is other alternative measure that could be taken to reduce the impact of the crisis.

Furthermore, this study analyses the movement of CPO futures in relation to KLCI and BOND. This study finds out that CPO futures has a strong negative correlation with the other traditional assets during all time periods. During the period of the crisis, CPO futures shows the lowest correlation than the period before the crisis. Hence, we may conclude that there may be some diversification benefits by including CPO futures into a part of a portfolio.

5.3 Portfolio Analysis

After determining the optimal weights of assets in each of the 4 portfolios, we analyse the risk and return characteristics of all the portfolios. We find that the Portfolio IV, containing CPO futures, stocks and bond, register the lowest risk with the same mean return recorded by other portfolios during all time periods. This finding leads us to conclude that CPO futures does provide diversification benefit to the traditional portfolio consisting of stock and bond.

To further analyse the effectiveness of CPO futures as a stand-alone asset and part of a portfolio, we compare its risk and return characteristics with the portfolios'. The portfolios that are chosen are only portfolios that include CPO. As a single asset, CPO futures does not fare very well. It registers negative mean returns during the period of crisis and the overall period. Moreover, it incurs higher risk than the portfolios'. As a part of a portfolio, CPO futures provides diversification benefit by reducing the risk of the portfolio. This is clearly evidenced by the low risk possessed by all the portfolios. Thus, we may conclude that CPO futures is better to be included as a part of a portfolio than be treated as a stand-alone asset.

Three portfolio measurement indices are employed by this study. There are Sharpe Index (Sharpe, 1966), Treynor Index (Treynor, 1965), and Adjusted Jensen Alpha Index (Jensen, 1969). These indices measure the risk-adjusted

returns of the portfolios. These indices use the portfolios excess returns, which take into account the risk-free rate, and then, the excess returns are adjusted using the portfolios unique or systematic risk. Using these measures, we find out that Portfolio II, containing CPO futures and stock, show a better performance than the rest of the portfolios during all time period. However, Portfolio II manage to outperform CPO futures only during the pre-crisis period. From the findings, CPO futures tends to perform better than all the portfolios. This is quite interesting as CPO futures generates almost the same mean return, but with a higher risk than what is posted by all the portfolios. We find out that the mixed results are due to the high risk-free rates during the period of the study which could slightly affect the measurement indices. This is because, during the study period, the mean returns registered by all portfolios and CPO futures are very low. With a low mean return and high risk-free rate, a portfolio would have a high and negative excess return. The negative excess return will then be divided by the standard deviation of the portfolio. The final value of the index will be higher if the value of standard deviation is high. In other words, CPO futures performance tends to look better due to its high risk. Hence, the performance of the portfolios and CPO measured by the indices must be viewed with caution.

From the findings, we find no evidence to suggest that the mean returns of a portfolio is significantly higher during pre-crisis period than during the crisis period. The standard two-sample t-Test cannot reject the null hypothesis of equality of mean returns of a portfolio during pre- and post-crisis periods. Thus, we may conclude that returns outlay of the portfolios cannot be proven to be significantly affected by the Financial Crisis.

5.4 Conclusion

In conclusion, the evidence from this study indicates that using CPO futures as a part of a portfolio does reduce the risk of a portfolio. This is because the CPO futures returns moves in the opposite direction of returns of stocks and bond.

Besides that, CPO futures is better to be considered as a part of a portfolio than be considered as a stand-alone asset. Although other empirical studies done overseas document that investing in a commodity-based futures instrument could strongly improve the performance of a portfolio consisting of traditional assets such as stocks and bond, the evidence from this study indicates that the effect of CPO futures towards a portfolio performance is mixed.

5.5 Recommendations

This type of study is relatively new in Malaysia. Thus, further studies are needed in this area. A look at the normality of the returns of the three assets should add depth and further strengthen this study. In the future, it is suggested that a closer inspection on the assumptions of normality of the returns should be carried out. Besides that, the investment performance of the portfolios should be tested for consistency in their performance. By finding the consistency of the portfolios performance, an investor would now have a basis for his decision-making. Besides that, one needs to consider extending the time period such as to cover a period of 10 years. By so doing, the final results could be more reflective of the actual performance of the assets. Another future study that is interesting to undertake is to investigate the diversification benefits of CPO futures as a part of existing portfolios in the market such as unit trusts or property trust. The results of this study could prove beneficial for the development of the MDEX and for the institutional investors.

A future study on developing an investable index of the CPO futures is very beneficial. This study could make CPO futures more attractive for investors to invest in it. This situation will further improve the liquidity of MDEX. In addition, it could also lead to more extensive studies on the area of alternative investment. Moreover, having an investable index in place, more foreign fund managers may consider investing in MDEX.