ABSTRACT

An Analysis of Portfolio Investment Management of Indonesian Government Bond
(A Case Study on Treasury Risk Management at PT Bank X)
Faishal Syahbana Fandi Saputra

The aim of this study is to analyze and to construct government bond portofolio. The analysis was using duration and vector autoregression to analyse the impact of interest rate volatility. The portfolio was exposed to the interest rate risk due to it's characteristics. When interest rates increase, bond price decrease. As a result, the mark to Market value will decrease, vice versa. This study used a descriptive statistics method based on portfolio data to analyse the maturity pattern. Each bond on the portfolio was measured using duration techniques. Duration techniques represent how much price of bonds will change due to the effect of interest rate volatility. Vector Autoregression analysis is used to see the impact of shock in interest rate to the price of bonds and Mark to Market value.

The study showed that concentration of assets is mainly on the long term bond. This composition could make loss if interest rate going higher. Analysis result indicates the risk due to unrealized loss on interest rate shocks could be minimized by selling bonds with high duration between first day until eighth day. Based on impulse response, in the ninth to fourteenth day, MTM value would decrease to the lowest point of USD 953,000. Traders might use this information to increase their portofolio with low duration bonds and high current yield.

This study suggests that traders are strictly recommended implement the barbell portfolio strategy. This strategy focus on bonds with short term and long term bonds. The composition must be balanced in order to minimize risk. Based on impulse respons analysis, shocks on interest rate on 30th day will make Mark to Market value decrease. This strategy could reduce potential loss, the duration and the yield to maturity.

INSTITUT PERTANIAN BOGOR

MB-IPB

Program Pascasarjana Manajemen dan Bisnis
Institut Pertanian Bogor