MetLife Mexico has a portfolio of assets and liabilities with a mix of exposures denominated in both real (UDI) and nominal (Peso) terms. In this paper, we will have an introduction on MetLife Economic Capital framework, and focus on the calculation of the interest rate risk for Economic Capital tailored to Mexican Market. Economic Capital (EC) is the amount of capital that an institution needs to hold in order to keep its probability of insolvency below a pre-specified threshold level. In the Economic Capital framework, interest rate risk is quantified in terms of the “worst case” change in market values over a one year time horizon. The “worse case” is defined by Principal Component Analysis according to a confidence level based on MetLife’s target rating.

We will discuss the following sections in this paper:
1. MetLife Economic Capital Framework
2. “Worst Case” scenarios defined by Principal Component Analysis
3. Similarity to the Solvency II Approach
4. A case study to show the detailed calculation of interest rate risk for Economic Capital.

Key words:
1. Economic Capital
2. Principal Component Analysis
3. Interest Rate Risk
4. Worse Case
5. Solvency II
6. MetLife

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