

# **OFFSITE SURVEILLANCE FOR THE PHILIPPINE BANKING SYSTEM: A MULTIVARIATE CAMELS APPROACH**

By

**MARY ANN E. CUEVAS**

A thesis submitted in partial fulfillment  
Of the requirements for the degree of

**Master of Statistics**

School of Statistics  
University of the Philippines  
Diliman, Quezon City

July 2015

## **Abstract**

The study used 74 unique financial ratios in predicting the performance of 616 Philippine domestic banks. Principal components analysis was employed to determine the salient financial indicators that relate to the banks' six (6) component and one (1) composite scores for capital adequacy, asset quality, management, earning, liquidity and sensitivity to market risk (i.e., CAMELS). Using the resulting principal components (PC), the scores are used in ordinal logistic models. The predictive abilities of the models are evaluated. PC interpretation facilitated the identification of salient characteristics of bank groups by CAMELS component. Ordinal logistic regression results put forward the need for specific models for identified bank groups. Moreover, component scores for management and sensitivity to market risk appear to have tampered predictive ability.