

**AR-SIEVE-BASED PREDICTION INTERVAL FOR
SUSTAINABLE DEVELOPMENT INDEX**

JACHELLE ANNE G. DIMAPILIS

**A Special Problem submitted
in partial fulfillment of the requirements
for the degree of Master of Statistics**

**SCHOOL OF STATISTICS
University of the Philippines
Diliman, Quezon City**

APRIL 2012

ABSTRACT

This study proposed a procedure for monitoring progress of sustainable development measured by indices. AR-sieve-based nonparametric prediction interval is constructed to determine whether the movement of the indices is significant or not. Points outside the interval are considered significant and imply positive or negative movement of the indices. The prediction interval constructed for sustainable development indices for the Philippines is capable of detecting significant movements that can be explained by policies and other factors.