Three Essays In Applied Econometrics
By Hiroshi Murao
Date Defended: Not available
Date Approved: Not available

Abstract
This dissertation includes three essays in applied econometrics. Each essay explores an interesting and important question in the real economic world. In the course of investigating the nature of each question, appropriate techniques are combined in order to overcome the problems of previous methods. It is not a simple application of textbook techniques. Rather, advanced techniques recently developed are appropriately combined so that our understanding of the question becomes deeper and improved.

The first essay is regarding the assessment of the effects of neighborhood land uses on residential house values. It is widely recognized that a nuclear plant or a prison, for example, often has an adverse effect on the property values of the nearby houses, while a park or a university usually has a beneficial effect. Such effects are estimated using a nonparametric regression method together with some advanced techniques in order to deal with potential problems.

The second essay considers the assessment of the sources of the economic growth in East Asia countries. East Asian countries experienced phenomenal economic growth from the 1970s to 1997, the so called "Asian Miracle," which ended when a financial crisis hit in 1997. There is a fundamental question with regard to the Asian Miracle. Which is the prime source of the rapid growth between capital accumulation and productive improvements? Our approach to the question utilizes a nonparametric derivative estimation method so that we do not need the strong assumptions used by previous approaches.

The third essay assesses the effectiveness of IMF lending programs. When a member country of the IMF faces external payment problems rooted in macroeconomic and/or structural imbalances, the country may ask the IMF for financial assistance to normalize external payments and correct underlying macroeconomic imbalances. Our approach is based on a vector autoregressive model with regime switching so that it provides a dynamic feature of evaluation over the wide range time horizon. Our approach also provides a way to estimate not only the total effect of IMF programs, but also the loan effect and the policy advice effect. This kind of separation is often very important in policy discussion.