## Report on Ph.D. Thesis Defence

Ph.D. Candidate Mohammad Irfan Saleh (PHD10201)

Date 30 July 2014 Time 15:30-17:30

Main referee Yoshitsugu Kanemoto

Referees Roberto Leon-Gonzalez

Chikako Yamauchi

Makoto Hasegawa

Tetsushi Sonobe

Takaaki Takahashi (University of Tokyo)

Dissertation Title DELINEATION OF FUNCTIONAL URBAN AREAS AND

EVIDENCE OF AGGLOMERATION ECONOMIES IN

**INDONESIA** 

Result: Pass (subject to minor changes)

## 1. Abstract

The main purpose of this thesis is to examine empirically the magnitudes of urban agglomeration economies in Indonesia. The thesis consists of three parts. The first part develops a new definition of urban areas in Indonesia based on functional approach. Based on this delineation, the second part estimates agglomeration economies on the production side in Indonesia. In Java Island, agglomeration economies are statistically significant and lie between two to three percent, even after controlling for endogenous labour quantity and labour quality. The market potential is also found to be significant in Java's urban areas. Outside Java, however, agglomeration economies as well as the market potential effect are not statistically significant. The third part examines agglomeration economies on the consumption side as well as the benefits of local infrastructure. This part concentrates on large cities in Java with total population of at least one million. The main estimation results are: the consumption side agglomeration economies are statistically significant and local infrastructure such as road network, hospital, and business facilities also produce significant benefits.

## 2. Result /Notes from the Examining meeting / Final Evaluation

The referees agreed that the draft contains significant enough contribution to the literature on urban agglomeration economies to be acceptable as a Ph.D. thesis. It uses a very rich dataset and arrives at robust conclusions in what constitutes a scientifically sound study. The topic is of high importance not only at the macro level, but also at the level of city planning and urban studies. Furthermore, the first chapter provides a new delineation of urban areas in Indonesia that will become a point of reference and the basis for future studies of urbanization in Indonesia. However, its writing has plenty of room for improvement. First, the explanation of the estimation results must be strengthened. Second, the author must provide the explanation of the merits of the thesis concerning data, estimation methods, and estimation results. Third, comparison with earlier studies is weak. The causes of the differences with earlier studies and the advantages of the thesis must be explained. Fourth, the author has to provide better explanation of the theoretical framework and the estimation method.

The author has made sincere efforts to improve the writing of the thesis, and the referees agree that the final version meets the requirement for a Ph.D. thesis.