

## Report on Ph.D. Thesis Defence

<b>Ph.D. Candidate</b>	KHOIRUNURROFIK
<b>Date</b>	September 4, 2014
<b>Time</b>	15:30-17:30
<b>Main referee</b>	Yoshitsugu Kanemoto
<b>Referees</b>	Roberto Leon-Gonzalez
	Chikako Yamauchi
	Makoto Hasegawa
	Tetsushi Sonobe
	Takaaki Takahashi (University of Tokyo)
<b>Dissertation Title</b>	AGGLOMERATION ECONOMIES, LOCAL INDUSTRIAL STRUCTURE, AND DISTRIBUTION OF ECONOMIC ACTIVITIES: EMPIRICAL EVIDENCE FROM INDONESIA

**Result:** Pass (subject to minor changes)

### 1. Thesis overview and summary of the presentation.

This thesis is an econometric study on the effects of urban agglomeration on plant-level productivity and local productivity growth, with special emphasis on the trends and determinants of the spatial distribution of manufacturing industries in Indonesia. It consists of three parts.

The first part identifies the sources of agglomeration economies and estimates their magnitudes, including spatial agglomeration externalities from neighbouring districts or cities. The results suggest that economies of localization and urbanization do exist, but the former appears stronger than the latter. Furthermore, the sources of agglomeration changed over the economic cycles toward localization economies.

The second part examines the dynamic aspect: the effects of agglomeration economies on the *growth* of productivity, rather than the *level* of productivity. The empirical findings suggest that both specialization and diversity are important for city-industry growth and that some externalities are stronger in different periods.

The third part analyses the trends and determinants of the spatial distribution of the manufacturing industry during the period of 1990–2010 by using an extension of

the spatial Ellison-Glaeser index. The main results are as follows. There is a long-term increasing trend of regional specialization driven by core regions within Java and by affluent regions outside of Java. Resource-based and labour-intensive industries show a smoothly declining trend of geographic concentration. Regional specialization and geographic concentration increased during the economic crisis but decreased in the recovery period.

**2. Notes from the Examining meeting (including changes required to the thesis by the referees).**

The referees agreed that using a large firm-level dataset and rigorous econometric methods, the thesis obtains many interesting empirical results that might help the formulation of policies in Indonesia. The referees however found that the draft has to be rewritten to deal with the following problems. First, the motivations of the research are not well explained. Second, the thesis will become much more appealing if it provides some policy recommendations. Third, it is not clear which findings are the original contributions of the thesis. Fourth, the explanations of the previous works are too short in many cases to be understandable. Fifth, some of important variables need more explanations. Sixth, the introduction of each chapter has to be revised to explain more clearly the motivation and contribution in order to convince readers that the research is unique and important for the literature.

**3. Confirmation by the Main Referee that changes have been done to the satisfaction of the referees.**

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

**4. Final recommendation.**

Pass