

博士論文審査結果報告
Report on Ph.D. / Doctoral Dissertation Defence

政策研究大学院大学
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審査委員会を代表し、以下のとおり審査結果を報告します。

On behalf of the Doctoral Thesis Review Committee, I would like to report the result of the Ph. D. / Doctoral Dissertation Defense as follows.

学位申請者氏名 Ph.D. Candidate	大石 陽子		
学籍番号 ID Number	PHD11108		
プログラム名 Program	政策分析プログラム Policy Analysis Program		
審査委員会 Doctoral Thesis Review Committee	主査 Main referee	WIE, Dainn	主指導教員 Main advisor
	審査委員 Referee	田中 誠 TANAKA, Makoto	副指導教員 Sub advisor
	審査委員 Referee	LITSCHIG, Stephan	副指導教員 Sub advisor
	審査委員 Referee	KHOO, Boo Teik	博士課程委員会委員長代理 Acting Chairperson of the Doctoral Programs Committee
	審査委員 Referee	小原 美紀 (大阪大学大学院国際 公共政策研究科)	外部審査員 Referee from outside institutions
論文タイトル Dissertation Title	Supply and Demand Side Analyses of Stagnant Female Labor Force Participation: Evidence from Indonesia 『停滞した女性労働参加に関する供給・需要サイドの分析--インドネシア の事例から』		
学位名 Degree Title	博士 (公共経済学) / Ph.D. in Public Economics		
論文提出日 Submission Date of the Draft Dissertation	平成 29 (2017)年 3 月 17 日	論文審査会開催日 Date of the Degree Committee Meeting	平成 29(2017)年 4 月 14 日
論文発表会開催日 Date of the Defense	平成 29(2017)年 4 月 14 日	論文最終版提出日 Submission Date of the Final Dissertation	平成 29(2017)年 7 月 4 日
審査結果 Result	合格 pass		

1. 論文要旨 **Thesis overview and summary of the presentation.**

Thesis overview

The origin of the thesis lies in the observation that female labor force participation of Indonesia remain low and stagnated between early 1990s and late 2000s. Thesis aims to investigate underlying factors of female labor force participation by analysing both supply side and demand side. Thesis describes Indonesia's economy and female labor market performance in chapter2. Chapter 3 provides detailed literature review while chapter 4 employs large microdata of Indonesia to examine married women's labor supply decision. Chapter 5 employs census data of large- and medium-sized firms in Indonesia and suggests that trade liberalization and technological upgrading decreases firms' demand for female workers. Chapter 6 concludes and discuss several policy implications.

Contribution to Relevant Literature

In the United States and other advanced countries, women's labor supply is well-studied in the literature. Blau and Kahn (2007) estimated women's own wage elasticity and income elasticity over two decades in US and showed sharp reduction in both estimates. They interpreted that sharp decrease in elasticities imply change in married women's attitude toward work/career. In Indonesia, no study ever examined elasticities of women's labor supply yet. Chapter 4 of the thesis contributes to the literature by showing evolution of women's own wage and cross wage elasticities over two decades.

The impact of trade and its distributional impact has been much discussed in the literature. However, few papers properly addressed endogeneity issue nor disentangled various channels/mechanism of trade impact on labor market. In Mexico, Juhn et al (2014) employed both input and output tariff at industry level and found out trade liberalization raises demand for female workers by increasing domestic competition. The chapter 5 of the thesis contributes to the literature by employing input/output tariff at much detailed industry level in the fourth largest labor market in the world, Indonesia. The findings from chapter 5 shows that technological upgrading of firm led by trade liberalization is unfavourable to unskilled, female workers which is new finding in the literature.

Findings from Main Chapters

Chapter 4 examines two main driving forces of female labor force supply: income effect and substitution effect. The chapter employs the methodology of Blau and Kahn (2007) and large labor force of Indonesia from 1995 to 2007 to examine the evolution of women's own wage and cross-wage elasticities. Thesis discusses detailed description of methodology and its limitation which does not properly address endogeneity issues. Chapter 4 shows that responsiveness of women's labor supply to own wage and spouse wage declined over time in Indonesia during the sample period. Thesis suggests that women's change in attitude toward work/career could be one possible interpretation of findings.

Chapter 5 investigates the impact of trade liberalization on demand for female workers in manufacturing sector of Indonesia in 1990s. The chapter utilized both output and input tariffs calculated at five-digit industry level. Empirical results show that increased domestic competition by reduction in output tariffs has no impact on demand for female workers. However, importing firm showed reduction in female employment when input tariff declined. The additional analyses tested the robustness of results by concentration level of industry, product shift/exit of firm, and ownership. Thesis provides important interpretation that foreign technology imported by trade liberalization reduces female employment. This interpretation confirms the hypotheses of skill-biased technological change where new technology favours more skilled workers even in developing countries such as Indonesia.

Policy Implication of Thesis

In chapter 6, thesis provides several policy suggestions based on the empirical findings in chapter 4 and 5. The thesis points out that gender-differential curriculum of Indonesia's vocational school as one reason that female workers are less attractive to firms pursuing technological upgrading. Thesis claims that more gender-equal curriculum in both vocational and general education system would enhance women workers' performance and attractiveness in Indonesia's labor market. The chapter also argues necessity of training program to equip female workers with more technology-oriented skill. The thesis concludes with suggestion for future research which further identifies type of technology and skills behind male-biased technological changes found in Indonesia.

Presentation

Ms. Oishi started her presentation emphasizing why researchers should pay more attention to women worker's employment in developing countries during her 45-minutes presentation, she showed her findings in structured way and carefully suggested interpretation of her findings. There followed questions and comments from the examiners and audience for one hour. She provided satisfactory answer to most of questions regarding methodology and findings and agreed to add alternative interpretation of findings and methodological limitation in chapter 4. She also received requests from examiners to improve policy implication, conclusion, and overall writing.

2. 審査報告 Notes from the Doctoral Thesis Review Committee (including changes required to the thesis by the referees)

The referees were generally satisfied with the contribution of the thesis, but made comments on overall writing, empirical strategy, and policy discussion to improve it.

Professor Khoo

Professor Khoo suggested to improve introduction of thesis to show importance and necessity of principal questions. He also pointed out that thesis can be benefited by clearly showing its contribution and improvement on existing literature. The necessity of thorough proof-reading and improvement of overall writing are also suggested. He kindly proposed to change the title of thesis to reflect core topic and key ideas of the thesis.

Professor Kohara

Professor Kohara suggested to put potential endogeneity issue and clarification for imputed wages in chapter 4. She also proposed to add industry-specific time trends in chapter 5 analyses to improve robustness of thesis. She also requested to provide more background information about Indonesia's economy and trade liberalization, so readers can easily understand the context and necessity of the study.

Professor Tanaka

Professor Tanaka provided suggestion to add justification, pros and cons for employing methodology of Blau and Kahn (2007) in chapter 4. He also suggested to add interpretation of import/export dummy variables on female employment in the

context of Indonesia. He also indicated that overall writing, conclusion, and policy implication of thesis should be significantly improved.

Professor Litschig

Professor Litschig suggested to clearly state contribution of chapter 4. He also requested to write down alternative interpretation of reduced elasticities found in chapter 4. He also asked to provide justification for assumptions and functional form in methodologies employed in chapter 4. He also suggested to discuss why findings in chapter 5 are different from previous literature to show clear contribution of study. He also mentioned potential limitation of chapter 5 as data only includes medium- and large- sized firms in manufacturing sector.

3. 最終提出論文確認結果 Confirmation by the Main Referee that changes have been done to the satisfaction of the referees

Ms. Oishi discussed all the comments from examiners/outside review with me to fully understand and correctly address raised issues. She added more context, explanation in chapter 2, and stated limitation/justification of her methodologies in chapter 3. She did additional analyses in chapter 5 to show robustness of her results according to comments suggested by reviewers. She also received one-month training from CPC to improve her writing skill and spent substantial time to improve thesis quality. Finally, she wrote down detailed point-by-point responses to all the comments which later confirmed by examiners.

4. 最終審査結果 Final recommendation.

I, as a main referee, recommend to award degree of Ph.D. in Public Economics to Ms. Oishi. Her chapter 5 has good potential to be published in international peer-reviewed journal. Chapter 5 addresses recent issue of globalization and distribution issue across gender of workers using unique data from Indonesia. The contribution and interesting results of paper will make it publishable in decent journals in development economics area. The findings from chapter 4 are unique as the paper is the first attempt to estimate elasticities of women's labor supply in Indonesia. I expect that chapter 4 would be well-received by journals which focus on South Asian economy. In conclusion, Ms. Oishi's thesis meets the criterion of GRIPS and thereby qualified to be awarded Ph.D. in Public Economics as she requested.