

博士論文審査結果報告
Report on Ph.D. / Doctoral Dissertation Defense
National Graduate Institute for Policy Studies (GRIPS)
 Associate Professor Hsu, Minchung

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 Doctoral Dissertation Defense as follows.

学位申請者氏名 Ph.D. Candidate	Trisukon Sawatrukkiat		
学籍番号 ID Number	PHD15408		
プログラム名 Program	GRIPS Global Governance Program (G-cube)		
審査委員会 Doctoral Thesis Review Committee	主査 Main referee	Hsu, Minchung	主指導教員 Main Advisor
	審査委員 Referee	Porapakkarm, Ponpoje	副指導教員 Sub Advisor
	審査委員 Referee	藤本 淳一 Fujimoto, Junichi	副指導教員 Sub Advisor
	審査委員 Referee	木島 陽子 Kijima, Yoko	博士課程委員会委員長代理 Acting Chairperson of the Doctoral Programs Committee
	審査委員 Referee	大津敬介 Otsu, Keisuke (慶応義塾大学商学部 教授 Keio University Faculty of Business and Commerce, Professor)	外部審査委員 External Referee
論文タイトル Dissertation Title (タイトル和訳)※ Title in Japanese	Essays on income, inequality and social insurance in developing countries 発展途上国における所得、不平等及び社会保険に関する研究		
学位名 Degree Title	博士 (政策研究) / Ph.D. in Advanced Policy Studies		
論文提出日 Submission Date of the Draft Dissertation	2020年6月18日	論文審査会開催日 Date of the Doctoral Thesis Review Committee	2020年7月16日
論文発表会開催日 Date of the Defense	2020年7月16日	論文最終版提出日 Submission Date of the Final Dissertation	2020年8月28日
審査結果 Result	<div style="display: flex; justify-content: space-around; align-items: center;"> 合格 Pass 不合格 Failure </div>		

※ タイトルが英文の場合、文部科学省に報告するため、和訳を付してください

Please add a Japanese title that will be reported to MEXT.

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

This dissertation investigates three important issues in economic research by focusing on developing countries with a large informal sector: 1) life-cycle earnings profiles and uncertainties, 2) life-cycle inequality, consumption/saving behaviors, social insurance programs and the policy implications and 3) social insurance and precautionary savings. Thailand was selected as a representative country for the analysis because it is a middle-income developing countries and has a large informal sector: approximately 55% of total workers are in the informal sector that is suitable for the analysis. Moreover, Thailand has developed various social welfare programs, including pension and universal health insurance that is not easy for a developing country and may have significant effects on households' consumption/saving behaviors and social inequalities.

This study first contributes to the literature of life-cycle earnings profiles and income uncertainties, which is mainly focusing on developed countries, by taking into account the informal sector, which is a unique feature of developing countries. In addition, a comparison between formal and informal sectors is also provided. This study finds that the growth rate of earnings in the formal sector is higher than that in the informal sector; the income shocks in the formal sector are more persistent (lasting longer) but the variance is less than in the informal sector. Second, this study contributes to the literature of studying income shocks and income/consumption inequalities by providing a quantitative analysis of the impacts of earnings

risks on life-cycle inequality in developing countries with incorporating earnings risk components of both the formal and informal sectors in a life-cycle model. Policy implications of various social programs for inequality is also performed with the life-cycle model. Third, this study provides empirical evidence using Thai data that supports the existence of precautionary savings, which is not clearly shown in the literature. For example, Starr-McCluer (1996) using the US data and Guariglia and Rossi (2004) using the UK data, but cannot fully control for the selection problem to identify the precautionary savings clearly.

The dissertation is organized as follows: Chapter 1 provides motivation, literature review and background information of informal sector and Thai institutional features. Chapter 2 estimates life-cycle earnings profiles and shocks in both formal and informal sectors using 2 Thai data sets. Chapter 3 develops a life cycle model to study income/consumption inequalities over the life cycle and policy implications of public pension and welfare programs quantitatively using model simulations. Chapter 4 empirically tests the crowding out effect of health insurance coverage on precautionary savings and applies several modern econometric methods to control for the possible selection bias. Chapter 5 concludes the study.

During the defense, Trity first presented her chapters 2-4 for about 60 minutes and then committee members provided comments to her dissertation. Trity also responded to each of the comments. The process went smoothly to the end and all committee members were satisfied with Trity's performance. The median score of the defense was 5.

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

All committee members recognized Trity's great effort and agreed that Trity has done a decent job in her PhD dissertation. The external referee, Prof Otsu from Keio Univ. concluded "the dissertation is well executed showcasing a nice combination of empirical and quantitative ability of the candidate." To further improve the dissertation, the committee also provided several useful comments for revision. The major points are summarized below:

- 1) In Table 2.3, I believe "High education" combines everyone with high school or more education. I have a concern that the "High education" group in the formal sector could include greater fraction of college graduates than the "High education" group in the informal sector, which would bias the formal-informal gap in earnings. I think this issue needs some discussion.
- 2) Didn't Townsend Thai data begin to include urban area in the annual survey only from 2006? If this is the case, using data from 2000 to compute transition probabilities between employment statuses could be misleading since these probabilities may be quite different in urban and rural areas.
- 3) It is mentioned that Tobit regression is used "... because saving could be negative, but negative values would not be observed due to censoring". However, given that "Monthly household savings are calculated as income minus consumption expenditures" (p67) in this study, wouldn't it be possible to observe negative savings?
- 4) Please add interpretations of the magnitude of the impact (coefficient of EPHI insurance). Is it economically large impact? Literature on precautionary saving in Thailand should be added.
- 5) As being modeled later in Eq(2.2), the residual in Eq(2.1) contains individual fixed

effect. Notice that there are some individual fixed variable on the RHS. If there is a correlation between the fixed effect in the error term and, say, education, location, or cohort, the estimated coefficients and the age-profiles from the regression will be biased. A common way to mitigate this bias problem is to run fixed effect regression separately for each education. (Also remove individual's time-invariant variables from the RHS.)

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

About 5 weeks after the defense, the revised version together with a summary of changes were submitted by the candidate to the main adviser. The main adviser also shared this revision with the other committee members although the final check was entirely left for the main adviser. The main adviser checked the revised version and found it satisfactory. The other committee members also did not have further comments on the revision. Therefore, on August 28th, it was confirmed that this revised version was accepted for the final submission.

4. 最終審查結果 Final recommendation

The doctoral thesis review committee recommends that GRIPS award the degree of Ph.D. in Advanced Policy Studies to Ms. Trisukon Sawatrukkiat.