

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

National Graduate Institute for Policy Studies (GRIPS)

政策研究大学院大学

Professor HSU Minchung

教授 HSU Minchung

審査委員会を代表し、以下のとおり博士論文審査に合格したことを報告します。

On behalf of the Doctoral Dissertation Review Committee, I would like to report the pass result of the Doctoral Dissertation Defense as follows.

プログラム名 Program	政策分析プログラム Policy Analysis Program
学位申請者氏名 (ID) Ph.D. Candidate (ID)	Leyton Swinburn Samuel (PHD20302)
Dissertation Title 論文タイトル (タイトル和訳)	Labor Informality, Redistribution, and Development: a Political Economy Perspective 非公式労働・再分配・経済発展への政治経済学的視点
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	2023年11月21日/ November 21, 2023
論文発表・審査会開催日/ Date of the Defense and the Doctoral Dissertation Review Committee	2023年12月19日/ December 19, 2023
論文最終版提出日/ Submission Date of the Final Dissertation	2024年1月10日/ January 10, 2024
審査委員会/ Doctoral Dissertation Review Committee	主査 Main referee HSU Minchung
	審査委員 Referee FUJIMOTO Junichi
	審査委員 Referee PORAPAKKARM Ponpoje
	審査委員 Referee 胡云芳 神戸大学 HU Yunfang Kobe University
	審査委員 (博士課程委員会) Referee (Doctoral Programs Committee) CHEY Hyoung-kyu

※ 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. Summary of Defense and Evaluation**

Mr. Swinburn Samuel Leyton (Sam) is a PhD candidate, who joined the 3-year PA program at GRIPS in 2020. Sam's research focuses on the informal economy and inequality issues in developing countries. He has developed a political economy approach for his Ph.D. dissertation, "Labor Informality, Redistribution, and Development: a Political Economy Perspective," which provides an economic analysis of the extensive informal employment in these economies. The novelty, also the main concept, of his work is that the level of enforcement on job formality serves as a policy tool for redistribution, determined through a probabilistic voting scheme pioneered by Lindbeck and Weibull (1987), with recent applications including those by Song, Storesletten, and Zilibotti (2012, *Econometrica*). His model offers a theory to explain both the existence and persistence of substantial informal employment in developing countries. Alongside the theoretical analysis, he also provides empirical evidence. For example, in Chapter 2, he uses Chile as an example and shows that even within the government sector, where the cost of monitoring is negligible, the enforcement of job formality falls significantly below 100%. In addition, he further shows that the model prediction on inequality and enforcement is consistent with cross-country data. The dissertation clearly demonstrates Sam's independent research ability with a thorough understanding of the related literature and strong analytical skills. As his main advisor, I am highly impressed with his exceptional research performance and find his dissertation to be very compelling. The dissertation defense was held on December 19<sup>th</sup> from 14:30 to 16:30. Sam presented an overview of his dissertation and the key points of the analyses in Chapters 2 and 3 for about an hour. The review committee members then spent approximately 30 minutes asking questions and providing comments and suggestions. Sam effectively responded to the questions and engaged in discussions with the committee members about improving the dissertation based on their feedback. From 16:00, the committee moved to another room to discuss the performance of Sam's defense. All committee

members were satisfied with his smooth presentation and confident responses at the defense. Based on the dissertation and performance of the defense, the committee gave Sam a high evaluation, concluding in a median score of 5.

## **2. Dissertation overview and summary of the presentation.**

### **Dissertation overview**

Sam's dissertation explores labor informality in developing countries through a political economy perspective. Labor informality is notably persistent in these countries, as seen in Chile, where despite a tripling of GDP per capita, informal employment remained around 30%.

Sam's research presents a novel political-economy model that provides a theory to explain the persistence of the sizable informal employment. The main concept is that the level of enforcement on job formality is a policy tool for redistribution and determined through a probabilistic voting scheme pioneered by Lindbeck and Weibull (1987) (Recent applications including Song, Storesletten, and Zilibotti, 2012, *Econometrica*). It argues that politicians (the government) may choose not to enforce formality for political benefits, a factor often overlooked in other studies that assume exogenous enforcement or imperfect information. Sam's model allows for endogenous enforcement with authorities having perfect information about workers' income and employment sector.

The main analyses are presented in Chapter 2 and Chapter 3. In Chapter 2, he develops a static political economy model, where income inequality within a generation drives labor formality. This model, calibrated to Chile, demonstrates how higher inequality leads to lower formality.

A dynamic model is further developed in Chapter 3 that includes economic growth to explain the weak link between growth and reductions in informality (i.e. the persistent size of informal

employment). This model considers inter-generational income inequality and the old-age dependency ratio as critical factors. It shows that increasing intergenerational inequality (higher growth) leads to lower formality, counterbalanced by a larger retired population, which can increase formality.

In addition to the development of theories, Sam also conducts empirical analysis with data from Chile and a panel of 63 countries (1998-2019) and show the results consistent with model predictions -- a negative correlation between inequality and labor formality. It also discusses the policy implications of these findings, suggesting that understanding the political motivations behind formality enforcement can help design more effective strategies to reduce informality.

### **Summary of the presentation**

The dissertation defense is held on December 19th from 14:30 to 16:30. Sam first presented an overview of the dissertation. Then he reported important points and main findings from the analyses in Chapter 2 – “LABOR INFORMALITY AND REDISTRIBUTION: A POLITICAL ECONOMY EQUILIBRIUM” and Chapter 3 – “WHY DOES INFORMALITY PERSIST DESPITE ECONOMIC GROWTH? A POLITICAL ECONOMY PERSPECTIVE” for about an hour. The review committee members then asked questions and provided comments/suggestions for about 30 minutes. Sam also responded to the questions and discussed with the committee members about how to improve the dissertation according to those comments.

### **3. Evaluation Notes from the Doctoral Dissertation Review Committee (including changes required to the dissertation by the referees)**

The committee members asked several questions and provided useful comments for improvement. Main comments include:

First, both Professor Fujimoto and Professor Hsu mentioned that the argument following Assumption 3 of the model (i.e., the contribution rate being set higher than the optimal rate) is not very convincing. Professor Fujimoto also commented on Assumption 1 of the model -- politicians prefer having a larger pension fund. The validity of this assumption might depend on the government's political ideology.

Professor Porapakkarm suggested that reporting the point estimates for the linear probability model, probit model, and logit model may be misleading.

Another comment by Professor Porapakkarm is to consistently refer to "economic growth" and/or "economic development" instead of "intergenerational inequality."

In addition, Prof Hu asked some clarification questions and Prof Chey asked for a clearer description about the contribution.

At the defense, Sam confidently responded to each professor's questions/comments and clarified some confusing points based on what he has done for the analysis. He also agreed with the comments/suggestions and said he will incorporate them in the revision. The review committee members were satisfied with his presentation and responses at the defense and agreed that his dissertation has a significant contribution to the literature. Therefore, the committee reached a conclusion of evaluation with a median score of 5.

After the defense, Sam carefully revised the paper accordingly. He provided more institutional details in Latin America and some evidence to support the assumptions made in the model. He also corrected the terms to make sure consistency and modified the tables and

the way of reporting empirical results according to the comments. In addition, he also prepared a 6-page note that clearly described the changes in his dissertation in response to the comments and questions at the defense.

**4. Confirmation by the Main Referee that changes have been done to the satisfaction of the referees and final recommendations.**

Given that the median score of the defense is 5, the main adviser is in charge of checking the revision and changes. After the defense, Sam discussed with the main adviser several times for revising the dissertation according to the comments from the committee members.

About 3 weeks after the defense, Sam submitted the revised manuscript to comments to the main adviser along with a 6-page note that clearly described changes in response to the comments and questions at the defense. The main adviser checked the revised version, together with a plagiarism check, and told Sam to make a few minor modifications. On Jan 10, 2024, the final version was submitted, and the main adviser found it satisfactory.

The doctoral dissertation review committee recommends that GRIPS award the degree of Ph.D. in Public Economics to Mr. Swinburn Samuel Leyton.