## 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 FUJIMOTO Junichi

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	Doan Ngoc Thang			
学籍番号 ID Number	PHD15201			
プログラム名 Program	Policy Analysis Program			
審査委員会 Doctoral Thesis Review Committee	主査 Main referee	藤 本 淳 一 FUJIMOTO Junichi	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	石原章史 ISHIHARA Akifumi	副指導教員 Sub Advisor	
	審査委員 Referee	道 下 徳 成 MICHISHITA Narushige	博士課程委員会委員長代理 Acting Chairperson of the Docto Programs Committee	ral
	審査委員 Referee	寺 西 勇 生 TERANISHI Yuki (慶應義塾大学商 学部准教授)	外部審査委員	
論文タイトル Dissertation Title	Three Essays on Time Consistency of Monetary Policy in Open Economy			
(タイトル和訳)※ Title in Japanese	開放経済における金融政策の時間整合性に関する研究			
学位名 Degree Title	博士(国際経済学)Ph.D. in International Economics			
論文提出日 Submission Date of the Draft Dissertation	2018年5月	論文審査会界 10 日 Date of the Do Thesis Review Co	octoral 2018年6月7日	
論文発表会開催日 Date of the Defense	2018年6月	7 日 論文最終版打 Submission Dar Final Dissert	tte of the 2018年8月22日	
審査結果 Result			不合格 Failure	

※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

If the title is in English, please translate in Japanese in order to report MEXT.

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

In economics, the time (in)consistency problem refers to a situation in which the decision maker (e.g., the policy maker) makes some plans of actions in the future but finds it suboptimal to adhere to the plan when the time to implement it arrives. In the case of monetary policy, this problem is typically such that the central bank is tempted to create "surprise inflation" in order to boost output, which, when correctly anticipated by the private agents, ends up in inflation with no increase in output.

This dissertation studies such a time consistency problem of monetary policy in a microfounded New Keynesian two-country model. The dissertation consists of five chapters. Chapter 1 describes the motivation, research objectives, methodology, and organization. Chapter 2 provides a survey of the existing studies on the time consistency problem of monetary policy and discusses the possible solutions to this problem proposed in the literature, such as adopting policy rules and delegating monetary policy to a conservative central banker. Chapters 3 and 4 present the main analyses of the dissertation. Chapter 3 examines whether the so-called Friedman rule (i.e., the monetary policy rule which leads to a zero nominal interest rate and which turns out to be optimal in a wide range of models) is less likely to be sustained under cooperation than under non-cooperation when governments are unable to commit to future monetary policy. The key finding is that depending on the severity of the monopolistic distortion, cooperation may make the Friedman rule more difficult to sustain compared to the non-cooperative environment and therefore may be counterproductive. Intuitively, this is because when the two governments jointly choose the money growth rate, they have more incentive to create surprise inflation since that does not lead to deterioration of the terms of trade. Chapter 4 assesses the effects of openness on the effectiveness of the socalled delegation approach in solving the time consistency problem of monetary policy. The model explicitly formulates the delegation process in which the government of each of the two countries is allowed to reappoint (or equivalently, replace) the current central bank by incurring a reappointment cost. The main finding is that as the economy becomes more open, it becomes easier for the delegation approach to achieve the first-best outcome. Intuitively, this is because as the economy becomes more open, the gains from boosting output in the home country become smaller and thus the central banks become less tempted to create surprise inflation. Finally, Chapter 5 provides conclusions and discusses policy implications.

In the presentation, the candidate explained the outline of his dissertation and then spent most of his time on Chapters 3 and 4, which contain the main analyses. He was well prepared for the presentation and explained his dissertation in an organized fashion. Remarkably, while his models and analyses are quite technical, he did his best to convey the basic intuitions behind his main findings. Following the presentation, he made satisfactory responses to the questions from the referees and other audience and he also received many useful comments and suggestions.

# 2. 審查報告 Notes from the Doctoral Thesis Review Committee (including changes required to the thesis by the referees)

The five referees, including the external referee, Professor Teranishi, who is an expert on the issue of optimal policy under the New Keynesian framework (Note: Professor Teranishi is visiting the University of Melbourne for sabbatical and joined the discussion via skype.) were largely satisfied by the candidate's dissertation and presentation, which resulted in the median score of 5. In fact, all referees gave the score of 5. At the same time, the referees provided many helpful comments and suggestions for further improving the dissertation. These comments and suggestions can be classified into the following three categories.

#### (1) Comments and suggestions on technical issues

There were several technical comments and suggestions. For example, Professor Teranishi stated that the candidate should clarify the assumption in the models in Chapters 3 and 4 on the presence (or absence) of aggregate uncertainty. He also mentioned that one of the tables in Chapter 3 was not explained well enough. Professor Porapakkarm suggested that modifying the utility function from the constant relative risk aversion utility function to a log utility function might facilitate the analysis. He also asked clarifications on the derivations of two key constraints (the budget constraint and the cash-in-advance constraint) in the model of Chapter 3. Professor Ishihara asked the candidate to clarify the sign of one of the key parameters, which is related to the cost of reappointing the central bank.

### (2) Comments and suggestions on verbal explanations

Given the highly theoretical and technical nature of the dissertation, the referees suggested that the candidate add verbal clarifications and interpretations of the key concepts and findings to facilitate the understanding of the readers. For example, Professor Teranishi suggested that the candidate add verbal explanation of "counterproductive cooperation" early on in Chapter 3. Professor Porapakkarm stated that the candidate should add discussions on why the candidate chose the delegation approach in Chapter 4 instead of other approaches used in the literature to address the time consistency problem. Professor Michishita asked which countries or historical episodes the analysis of the dissertation is most relevant to and the candidate promised to provide additional explanations on this issue.

#### (3) Comments and suggestions on the writing of the dissertation

The referees pointed out a number of issues related to the writing of the dissertation. For example, Professor Teranishi pointed out that the equations placed at the end of the sentences missed commas/periods. He also suggested that the candidate unify the tense in the literature review to the present tense. The referees also pointed out typos, incomplete sentences, and other grammatical issues that need to be fixed.

## 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

The candidate carefully revised the dissertation and prepared a letter of response that explains how he addressed each one of the comments, suggestions, and questions. The main referee extensively checked the revised dissertation as well as the letter of response and confirmed that all necessary revisions are made. The main referee then circulated these documents to the doctoral thesis review committee, which agreed that the revised dissertation is satisfactory.

#### 4. 最終審查結果 Final recommendation

The doctoral thesis review committee recommends the degree of Ph.D. in International Economics be awarded to Mr. Doan Ngoc Thang.