

**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	Le Thanh Ha		
学籍番号 ID Number	PHD15202		
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	LEON- GONZALEZ Roberto	副指導教員 Sub Advisor
	審査委員 Referee	HSU Minchung	副指導教員 Sub Advisor
	審査委員 Referee	諸星 穂積 MOROHOSI Hozumi	博士課程委員会委員長代理 Acting Chairperson of the Doctoral Programs Committee
	審査委員 Referee	藤原 一平 FUJIWARA Ippei (慶應義塾大学経 済学部 教授)	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 Welfare Costs of Shifting Trend Inflation and Policy Uncertainty  インフレーションのトレンドの変動及び政策の不確実性がもたらす厚生 コストに関する研究		
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2日	論文審査会開催日 Date of the Doctoral Thesis Review Committee	2018年6月1日
論文発表会開催日 Date of the Defense	2018年6月1日	論文最終版提出日 Submission Date of the Final Dissertation	2018年8月21日
審査結果 Result	合格 Pass		

※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.**

Macroeconomists often use, for the sake of simplicity, models that exhibit a zero trend inflation rate. In reality, however, the trend inflation rate is generally positive and it also changes over time rather than taking a constant value. The welfare consequences of incorporating a more realistic inflation process into macroeconomic models are still not fully explored in the literature.

This dissertation uses a micro-founded New-Keynesian framework to analyze the relationship between such shifting trend inflation, monetary policy uncertainty, and economic welfare. The dissertation consists of five chapters. Chapter 1 provides the overview of the dissertation, states the main research questions, and describes the methodology which will be used to answer these questions. Chapter 2 discusses some important features of the U.S. data including shifting trend inflation and provides a review of the related literature. Chapters 3 and 4 contain the main analyses of the dissertation. Chapter 3 develops a New Keynesian model which incorporates a shock to trend inflation as well as monetary policy uncertainty, where the latter is modelled as changes in the volatility of exogenous shocks to the nominal interest rate. Through numerical simulations, which involve choosing parameter values using the U.S. data and then numerically solving the model, the dissertation shows that the interaction between shifting trend inflation and policy uncertainty decreases welfare and therefore creates welfare cost. The dissertation also decomposes welfare into three (deterministic, level, and volatility) components and shows how each component changes in response to changes in the inflation process. Chapter 4 presents a New Keynesian model that features staggered price and wage contracts, which are often adopted in the literature to introduce price and wage stickiness, to study welfare costs of exogenous variations in trend inflation. Again through numerical simulations, the dissertation shows that the welfare consequences of constant positive trend inflation and shocks to trend inflation are severe, especially when the trend inflation rate is high. Remarkably, among the two channels, staggered wage contracts are shown to have much more important implications on welfare than staggered prices. The analysis therefore implies that models without staggered wage contracts understate the true costs of shifting trend inflation. Finally, Chapter 5 discusses the policy implications derived from the analyses and concludes the dissertation. An important policy implication is that trend inflation should be kept low.

In the presentation, the candidate explained the overview of his dissertation and then mostly focused on Chapters 3 and 4, which are the core of the dissertation. He was well prepared for the presentation and explained well his models and analyses, which are quite technical and

complicated. Following the presentation, he received many questions from the referees and other audience and responded to them in a satisfactory fashion. He also received many helpful comments and suggestions, which he promised to reflect in the revision.

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

The five referees, including the external referee, Professor Fujiwara, who is an expert on monetary policy and the New Keynesian framework, were generally satisfied by the dissertation and the presentation, resulting in the median score of 5. The referees, however, raised several issues to be addressed in the final version of the dissertation. These issues fall into one of the following three categories.

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

There were several technical comments and suggestions. For example, Professor Leon-Gonzalez mentioned that the candidate should provide further details of the procedures used to estimate some of the key parameters. He also asked the candidate to add explanations on the relevance of using the second order approximation of the key functions, instead of third or higher order approximations. Professor Fujiwara asked clarification of why one of the three components of welfare (i.e., the level component), which is often zero in this type of decomposition analysis, is non-zero in the analysis of the dissertation. Professor Morohoshi mentioned that the candidate should describe the sources of data and the computer software used in the analysis.

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

Professor Morohoshi suggested that the candidate provide explanations of the key concepts in the introduction to make the dissertation easier to follow for non-experts. Professor Hsu suggested that the candidate provide clearer comparisons of his findings from the numerical simulations and those reported in the literature. He also mentioned that the candidate should provide more discussions that justify the practical relevance of the staggered wage contracts. Related to the conclusion of the dissertation that positive trend inflation has a negative impact on welfare, Professor Fujiwara suggested that the candidate also provide a discussion of the argument in the literature that favors positive inflation (e.g., 2 percent inflation target) so as to avoid hitting the so-called “zero lower bound” of the nominal interest rate.

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

Professor Morohoshi suggested that the candidate provide a table that summarizes all

variables that appear in the analyses so as to make it easier for the readers to follow the analyses. Professor Hsu mentioned that the candidate should consider creating a single reference section for the entire dissertation, instead of creating it for each chapter. The referees also pointed out a number of typos and other grammatical issues.

### **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 went through all the comments, suggestions, and questions from the referees and revised the dissertation. This revision process involved conducting additional numerical simulations and adding verbal explanations. He then prepared a letter of response that explains how he addressed each one of the issues raised by the referees. The main referee checked the revised dissertation as well as the letter of response through multiple iterations 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. Le Thanh Ha.