

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

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	Kritsanee Pisitsupakul		
学籍番号 ID Number	DOC16101		
プログラム名 Program	Public Policy Program		
審査委員会 Doctoral Thesis Review Committee	主査 Main referee	林 文夫 HAYASHI Fumio	主指導教員 Main Advisor
	審査委員 Referee	藤本 淳一 FUJIMOTO Junichi	副指導教員 Sub Advisor
	審査委員 Referee	LEON-GONZALEZ Roberto	副指導教員 Sub Advisor
	審査委員 Referee	隅藏 康一 SUMIKURA Koichi	博士課程委員会委員長代理 Acting Chairperson of the Doctoral Programs Committee
	審査委員 Referee	小枝 淳子 KOEDA Junko 早稲田大学	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	Housing, Banking Credit, and Monetary Policy: a NK-DSGE Analysis 住宅、銀行信用、そして金融政策：NK-DSGE モデルによる分析		
学位名 Degree Title	博士（公共政策分析）Ph.D. in Public Policy		
論文提出日 Submission Date of the Draft Dissertation	2020年3月18日	論文審査会開催日 Date of the Doctoral Thesis Review Committee	2020年4月15日
論文発表会開催日 Date of the Defense	2020年4月15日	論文最終版提出日 Submission Date of the Final Dissertation	2020年6月3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

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

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

The New Keynesian (NK) DSGE (dynamic stochastic general equilibrium) model has become the mainstream in macroeconomics over the last 20 years or so. Like the RBC (real business cycle) model before it, it is a macro model with solid micro foundations. But unlike the RBC, it features stickiness in prices or in wages. Because of this, the model can address the effect of monetary policy which in the RBC model is irrelevant.

Recent major developments in the NK approach includes (a) to incorporate constraints in borrowing between households differing in patience, (b) to examine the role of housing in the propagation of macro shocks, and (c) to incorporate the banking sector. It is important to consider both (a) and (b) because the amount a household could borrow depends on the value of housing as a collateral. This dissertation incorporates all three features in a model that is calibrated to the Thai economy. The main focus of the dissertation is how the effect of monetary policy is related to these three features.

After the introductory chapter, Chapter 2 of the dissertation describes the housing market and mortgage loans in Thailand. The discussion centers around the issue of how to measure the LTV (loan-to-value) ratio which is a key variable in models to be developed in subsequent chapters.

Chapter 3 develops an NK DSGE model that incorporates features (a) and (b) mentioned above. The model closely resembles Monacelli (2009). The methodological contribution of this chapter is to estimate, rather than calibrate, the model parameters. Estimation on Thai data is by a Bayesian method. A major finding, not addressed in Monacelli (2009), is that the (constant) LTV ratio, if it were higher, would amplify the effect of monetary policy, in both recessions and booms.

Chapter 4 introduce feature (c) (the banking sector). Now the borrowing and lending are between (impatient) households and banks, not between households with differing patience

as in Chapter 3. The model now can address the role of the central bank's prudential policy (the policy governing the capital adequacy ratio for commercial banks), because the prudential policy affects the supply of bank loans to households. Another difference from Chapter 3 is that the LTV ratio governing loans is time-varying, responding to macro variables. The formulation of the time-varying LTV and the banking sector is adapted from Falagiarda and Saia (2017). The Chapter 4 model differs from their model in several respects. Wages are sticky and treatment of housing seems more natural in the Chapter 4 model. The connection of the LTV ratio to monetary policy is more naturally addressed here because the LTV ratio is time-varying.

Chapter 5 concludes the dissertation by listing the main findings and agenda for future research.

*References:*

Monacelli, T. (2009), "New Keynesian models, durable goods, and collateral constraints", *Journal of Monetary Economics*.

Falagiarda, M. and A. Saia (2017), "Credit, endogenous collateral and risky assets: a DSGE model", *International Review of Economics and Finance*.

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

Among the members of the doctoral thesis review committee, there was a general consensus that the presentation at the defense was well-organized and clear and that the dissertation includes enough material.

The members made a number of questions and comments. They include the following in the order of importance.

1. What are the differences between the Thai economy, on one hand, and the U.S. and Euro Area economy on the other, that are reflected in the models of Chapters 3 and 4?

2. Relation to the literature should be more fully and explicitly discussed.
3. Policy implications should be stated, preferably in the concluding chapter.
4. The exposition should be improved. There are typos, confusing notations, and many incidents of awkward English.

The members of the committee reached conclusions that revisions should be made following these comments, and that the members would check a revised version within about a week after its submission.

**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 four weeks after the defense, the revised version submitted by the candidate was sent to the committee members. They checked the new version and found that the revisions were made appropriately. Thus, they left the final check entirely to the main adviser. The main adviser checked the revised version and found it satisfactory.

**4. 最終審查結果 Final recommendation**

The doctoral thesis review committee recommends that GRIPS award the degree of Ph.D. in Public Policy to Ms. Kritsanee Pisitsupakul.