

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

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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	Kris A. Francisco		
学籍番号 ID Number	PHD12302		
プログラム名 Program	政策分析プログラム Policy Analysis Program		
審査委員会 Doctoral Thesis Review Committee	主査 Main referee	田中 誠 TANAKA, Makoto	主指導教員 Main advisor
	審査委員 Referee	ESTUDILLO, Jonna	副指導教員 Sub advisor
	審査委員 Referee	松本 朋哉 MATSUMOTO, Tomoya	副指導教員 Sub advisor
	審査委員 Referee	園部 哲史 SONOBE, Tetsushi	博士課程委員会委員長 Chairperson of the Ph. D. Programs Committee
	審査委員 Referee	高橋 和志 TAKAHASI, Kazushi (上智大学/ Sophia University)	外部審査員 Referee from outside institutions
論文タイトル Dissertation Title	Essays on Roll-on/Roll-off Policy: The Impact of Nautical Highways in the Philippines ロールオン・ロールオフ政策について -フィリピンにおける海上幹 線のインパクト-		
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	平成 28(2016)年 5 月 31 日	論文審査会開催日 Date of the Degree Committee Meeting	平成 28(2016)年 6 月 28 日
論文発表会開催日 Date of the Defense	平成 28(2016)年 6 月 28 日	論文最終版提出日 Submission Date of the Final Dissertation	平成 28(2016)年 8 月 24 日
審査結果 Result	合格 pass		

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

Thesis overview:

This dissertation empirically investigates the impact of transportation policy called the Roll-on Roll-off (Ro-Ro) policy on the household income and education in the Philippines.

After Introduction, Chapter 2 presents the background of the Ro-Ro policy. Due to the archipelagic structure of the country, maritime transportation plays a crucial role in the Philippines. Farmers and traders who aim to reach bigger markets need to transport their products to regional centers, as these serve as hubs for economic activities. In 2003, the Ro-Ro policy was implemented in the Philippines to better integrate sea and road transportation and improve the inter-island economic linkages. With the Ro-Ro restructuring, vehicles containing their cargoes can directly roll-on the ship at point of embarkation and roll-off the ship at point of destination. This policy eliminates the need for cargo-handling equipment and portside facilities, thereby simplifying shipping procedure and lowering transportation costs.

Chapter 3 then examines the effect of the Ro-Ro policy on agricultural household income by utilizing a panel fixed-effect model that exploits the differences in geographical distances of agricultural households from the nearest Ro-Ro port. Due to the archipelagic structure of the Philippines, she distinguishes between agricultural households that are on the same island as the Ro-Ro port and agricultural households that are not on the same island as the Ro-Ro port. She generally finds positive impact of the Ro-Ro policy on agricultural household income. Specifically, the agricultural households that are closer to the Ro-Ro port and located on the same island as the Ro-Ro port have higher income from non-agricultural sources/activities, while the agricultural households that are similarly closer to the ports but are not on the same island as the Ro-Ro port appear to have higher income from agricultural sources/activities. She discusses that the households may be specializing in entrepreneurial activities based on their comparative advantage.

Chapter 4 uses a municipality-level pseudo panel and investigates the effect of the Ro-Ro policy on education by employing the double difference (DD) estimation. She compared the school attendance of ages 5 to 21 in municipalities near the Ro-Ro ports with that in municipalities near the non-Ro-Ro ports before and after the policy implementation. She finds that the Ro-Ro policy led to an increase in school attendance of both males and females in the pre-primary, primary, secondary and tertiary level of education. Another finding is a decrease in employment of ages 15 to 21, which is complimentary to the increase in school attendance. She further examines several possible mechanisms to explain these results. She shows that both school attendance and household income are positively affected by the Ro-Ro policy. Moreover, she finds a strong correlation between school

attendance and household income. These would imply that households tend to invest in their children's education when provided with opportunities that increase their income.

Presentation:

The candidate first talked about the background and motivation of the dissertation and then presented the main findings of the two main research chapters. She then responded to the questions and comments from the examiners and the wider audience.

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

The referees were generally satisfied with the originality and contribution of the dissertation. They however had a number of suggestions for improvements. The comments from the referees include:

- Provide more persuasive arguments about motivation and relevance of the dissertation.
- Enrich policy implications in some parts of the dissertation.
- Discuss the underlying conceptual framework and mechanisms that can help understand how the Ro-Ro policy generates positive impacts on household income and education.
- Better justify why non-agricultural households were excluded in the analysis.
- The expression of the equations in Chapter 4 should be improved.
- Try to add some variables such as the education of household head in the analysis of Chapter 3.

## **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 made efforts to address the concerns of the referees and to improve the quality of the dissertation. The final version meets the requirement for a Ph.D. dissertation. Final recommendation was a pass.

## **4. 最終審査結果 Final recommendation.**

We recommend that the degree of PhD in Public Economics be awarded to Ms. Francisco.