## Report on Ph.D. Thesis Defence

Ph.D. Candidate Giang Thanh Long

Main referee Wade Pfau

Referees 大来 洋一

大山 達雄

国枝 繁樹 (一橋大学大学院国際企業戦略研究科)

坂本 純一(野村総研)

Dissertation Title Demographic Changes, Elderly Poverty, and Social Protection

Finances in Vietnam

Result: Pass (subject to minor changes)

## Presentation and Results:

- 1. Mr. Giang presented his dissertation in about 50 minutes, and the presentation was followed by comments and questions from the members of the examination committee and other participants. The thesis was written under the direct supervision of Associate Prof. Wade D. Pfau. The thesis was organized into three chapters, each of which represents an independent paper. All three chapters are currently under review at international refereed journals. Chapter 3 has already received an favorable revise and resubmit request from Development and Change, which is published for the Institute for Social Studies in the Hague, and is recognized by the ISI Journal Citation Reports as having a ranking of 12 out of 38 in the category "Planning and Development" with an impact factor of 1.021 in 2007. I am confident that the dissertation contents will eventually result in three published papers.
- 2. Long answered the queries raised by the examiners and other participants at the seminar satisfactorily with clarity and coherence.
- 3. The meeting of the Examination Committee was held immediately after the presentation. The Committee was chaired by Professor Tatsuo Oyama and included Assoc. Prof. Pfau, Prof. Okita, Prof. Kunieda, and Prof. Sakamoto, who served as the external examiner. The Committee decided that both the contents of the dissertation and the public defense were satisfactory for conferring the doctoral degree. However, it was agreed in the meeting that some minor changes in the format and presentation would improve the clarity of the dissertation. It was, therefore decided

- that the required changes and revisions be made in the dissertation before the final submission. It was further decided that Associate Prof. Wade Pfau will be responsible to check and validate the revisions.
- 4. Long has made the changes recommended by the examination committee members and has given a detailed report of the changes to me. I have examined those changes and I am satisfied that he has fully followed the recommendations of the examination committee.

## Summary of the Thesis

In accordance with the international trends in the field of economics, this dissertation includes three chapters, each of which represents a distinct paper that is ready for journal submission. While all three chapters are about the same general topic indicated in the dissertation title, each chapter employs a distinct methodology and framework.

Chapter 1 uses a probit model regression analysis to explore the possible factors underlying the poverty incidence of the Vietnamese elderly and their households. The findings show that the elderly and their households in urban and rural areas are significantly different, and therefore they should be considered separately. In both areas, some individual characteristics of the elderly, such as advanced ages, marital status, and residential regions, are crucial determinants of the likelihood of poverty for the elderly. Particularly in the rural areas, remittances and social security benefits are found to be important to reducing poverty. However, some household characteristics are found to be insignificant factors in determining the likelihood of poverty for the elderly. The chapter argues that reducing regional disparities, promoting the rural economy, and reforming the social security system are key policy strategies for reducing poverty incidence for the elderly and their households.

Chapter 2 uses a stochastic actuarial model to provide long-term projections for the financial balance of Vietnam's contributory pension scheme, which is an important part of the social security system in Vietnam. The chapter provides estimates showing the long-term financial status for the Vietnamese pension scheme, and presents the results after modifying a number of parameters to show the critical factors of the scheme's financial stability. Generally, the median values of the baseline projections show that the pension fund will be depleted in about 2053 with a 90-percent confidence interval

range of 8 years. Sensitivity tests show that the retirement age, the indexation method for pension benefits, and the contribution rate are all crucial determinants of the pension fund balance in the long term. Increases in retirement ages or inflation indexation for the pension benefits will help to substantially improve the pension fund balance over the long run.

Chapter 3 uses an ex ante microsimulation analysis to estimate the potential impacts and costs of an extended social pension scheme in Vietnam. More specifically, using the nationally representative data from the Vietnam Household Living Standard Survey (VHLSS) in 2004, it simulates how the poverty indices for the elderly in Vietnam, including poverty rates, poverty gap, and poverty severity, would have been changed in the presence of such a social pension scheme in the past. It considers a number of social pension schemes for different categorical targeting groups of elderly people along with various transfer parameters to assess the impacts of the scheme on social welfare. The categorical targets focus on such groups as rural elderly, female elderly, elderly who do not otherwise receive social security benefits, and so on. Even with limited budgeting, the simulated results imply that a social pension scheme would significantly reduce poverty incidence for the elderly. In particular, it finds evidence that focusing a program on rural elderly would be the most effective in a number of ways, and that the programs with lower eligibility ages and lower benefits would have a bigger impact on poverty than the programs with comparable costs that provide higher benefits but also have higher eligibility ages. The simulation of long-term financial costs of the proposed schemes would be about 3 percent of GDP at the highest.

## **Comments of Committee Members**

- Committee members generally congratulated Long for producing an excellent dissertation with high academic standards.
- 2. For Chapter 1, committee members asked for more details about the definition of the poverty line, the reason for using probit analysis on a poverty indicator instead of directly using expenditure data, a comparison of the results to other developing countries to know what aspects of Vietnam's case are common or special, and a few other clarifications of terms used in the chapter. Long has addressed these concerns in his revisions.
- 3. For Chapter 2, committee members asked about why the pension fund assets fall so dramatically starting in about 2046, what are the long-term implications of

having wages grow faster than the returns available to pension fund assets, whether the suggested reforms are parametric in nature or imply a switch to a defined-contribution pension, and for more clarification about the fertility and mortality assumptions and forecasts. It was also mentioned that it would be easier to make comparisons if each of the figures shared a common scale. Long has addressed these issues in his revisions.

4. For Chapter 3, the comments of the committee members aimed at broadening the analysis of the chapter to include a consideration of the social pension in relation to the general poverty alleviation and welfare programs for people of all ages, how the social pension would interact with the existing contributory pension, why means testing was not considered as an eligibility criterion, and how would policy makers find the financial resources to pay for the scheme. Long has addressed these issues in his revisions.