

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

National Graduate Institute for Policy Studies (GRIPS)

政策研究大学院大学

Professor LITSCHIG Stephan

教授 LITSCHIG Stephan

審査委員会を代表し、以下のとおり博士論文審査に合格したことを報告します。

On behalf of the Doctoral Dissertation Review Committee, I would like to report the pass result of the Doctoral Dissertation Defense as follows.

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| プログラム名<br>Program  | 政策分析プログラム<br>Policy Analysis Program   |  |
| 学位申請者氏名 (ID)<br>Ph.D. Candidate (ID)   | Le Quang Chien (PHD20301)  |  |
| Dissertation Title<br>論文タイトル<br>(タイトル和訳)   | Essays on Gifted and Elite Education and Academic<br>Performance in Vietnam<br>ベトナムにおける進学校とエリート学級の教育効果 |  |
| 学位名<br>Degree Title  | 博士 (開発経済学)<br>Ph.D. in Development Economics   |  |
| 論文提出日/<br>Submission Date of the Draft<br>Dissertation                                   | 2022年12月16日/<br>December 16, 2022  |  |
| 論文発表・審査会開催日/<br>Date of the Defense and the<br>Doctoral Dissertation Review<br>Committee | 2023年1月13日/<br>January 13, 2023  |  |
| 論文最終版提出日/<br>Submission Date of the Final<br>Dissertation                                | 2023年2月22日/<br>February 22, 2023   |  |
| 審査委員会/<br>Doctoral Dissertation<br>Review Committee                                      | 主査<br>Main referee   | LITSCHIG Stephan   |
|  | 審査委員<br>Referee  | 高橋 和志<br>TAKAHASHI Kazushi                                 |
|  | 審査委員<br>Referee  | WIE Dainn  |
|  | 審査委員<br>Referee  | 田中 隆一<br>東京大学<br>TANAKA Ryuichi<br>The University of Tokyo |
|  | 審査委員 (博士課程委員会)<br>Referee (Doctoral<br>Programs Committee)   | 城所 幸弘<br>KIDOKORO Yukihiro                                 |

※ 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. Summary of Defense and Evaluation**

Chien's dissertation empirically examines the effects of student tracking, using administrative and original survey data on public high school students from a province in Vietnam. Student tracking, i.e. separating students into groups by ability, is a feature of many education systems around the world. While tracking allows for group-specific instruction, which might be beneficial for all groups, it also limits the interaction between students with different levels of ability, which might harm the weaker students.

The first chapter considers effects on marginal students who were admitted to an elite high school. The analysis exploits the fact that admission was based primarily on a high school entrance exam, which creates a natural comparison of barely accepted and barely rejected students. The results suggest that attending the elite high school reduces performance on science subjects in the university entrance exams. Such a negative effect has not been found in prior work. The finding is also at odds with the received wisdom that grouping with higher-ability peers should increase the marginal student's performance. To better understand this result, Chien conducted an original online follow-up survey with about half the students from the original sample. Results suggest that marginal elite high school students report having received less teacher attention during high school, compared to marginally rejected students who went to regular public high schools. At the same time, elite school students were more likely to have had a teacher who prepares students for international science Olympics competitions. A plausible explanation for the negative effect on marginal students is therefore that Olympics teachers focused on top students to the detriment of marginal students in the elite high school science track.

The second chapter of the dissertation looks at marginal students who were admitted to an elite class within one of 85 regular public high schools. The main benefit of a within-school comparison is that factors like school location and infrastructure as well as the school curriculum are held constant. Moreover, according to interviews Chien conducted with several school principals, the same teachers are often assigned to teach both elite and regular classes within the same school. As in the previous chapter, the analysis exploits the fact that admission into the elite class is partly based on a high school entrance exam. Results suggest that attending an elite class increases university entrance exam scores of marginal science and social science track students. Chien's study is the first to consider regular public high schools, as opposed to within school tracking in elementary or middle school or within elite public or private schools. Compared to much of the literature which looks at a single school or only a few specific schools, Chien's study sample includes basically the universe of regular public schools from an entire province.

Given the abovementioned contributions, the doctoral dissertation review committee recommends that GRIPS award the degree of Ph.D. in Development Economics to Mr. Chien LE QUANG.

## **2. Dissertation overview and summary of the presentation.**

Chien's dissertation empirically examines the effects of student tracking, using administrative and original survey data on public high school students from a province in Vietnam. Student tracking, i.e. separating students into groups by ability, is a feature of many education systems around the world. While tracking allows for group-specific instruction, which might be beneficial for all groups, it also limits the interaction between students with different levels of ability, which might harm the weaker students. Existing studies mostly focus on across-school

tracking and the evidence for marginal students is mixed, ranging from zero to substantially positive. In contrast, there are only few studies evaluating effects of within-school tracking.

The first chapter considers effects on marginal students who were admitted to an elite high school. The analysis exploits the fact that admission was based primarily on a high school entrance exam, which creates a natural comparison of barely accepted and barely rejected students. For science track students, the results suggest that attending the elite high school reduces performance on science subjects in the university entrance exams. Such a negative effect has not been found in prior work. The finding is also at odds with the received wisdom that grouping with higher-ability peers should increase the marginal student's performance. To better understand this result, Chien conducted an original online follow-up survey with about half the students from the original sample. Results suggest that marginal elite high school students report having received less teacher attention during high school, compared to marginally rejected students who went to regular public high schools. At the same time, elite school students were more likely to have had a teacher who prepares students for international science Olympics competitions. A plausible explanation for the negative effect on marginal students is therefore that Olympics teachers focused on top students to the detriment of marginal students in the elite high school science track. For social science track students, results suggest that marginal elite school students were more likely to stay on track and take social science university exams compared to marginally rejected students who tended to take the math track university entrance exams. This sample selection makes it difficult to attribute differences in test performance to elite high school attendance.

The second chapter of the dissertation looks at marginal students who were admitted to an elite class within one of 85 regular public high schools. The main benefit of a within-school

comparison is that factors like school location and infrastructure as well as the school curriculum are held constant. Moreover, according to interviews Chien conducted with several school principals, the same teachers are often assigned to teach both elite and regular classes within the same school. As in the previous chapter, the analysis exploits the fact that admission into the elite class is partly based on a high school entrance exam. In contrast to admission to the elite high school however, admission to an elite class within regular public schools was based also on performance during middle school. Results suggest that attending an elite class increases university entrance exam scores of marginal science and social science track students. In contrast to the voluminous literature on across-school tracking, there are surprisingly few studies on within-school tracking. In fact, Chien's study is the first to consider regular public high schools, as opposed to within school tracking in elementary or middle school or within elite public or private schools. Compared to much of the literature which looks at a single school or only a few specific schools, Chien's study sample includes basically the universe of regular public schools from an entire province.

### **3. Evaluation Notes from the Doctoral Dissertation Review Committee (including changes required to the dissertation by the referees)**

The defense mainly centered on interpretation of the results and additional analyses the referees would have liked to see, rather than the credibility of the results that were presented.

One referee took issue with the claim that this was the first causal study on elite education in Asia. This has been qualified as the first within-school study on tracking in public high schools.

Another concern was that even for a within-school design, teacher effort could be part of the mechanism for the positive effect on marginal elite class students, beyond higher peer quality. This limitation was acknowledged more explicitly in the revision.

One referee asked for additional heterogeneity analysis based on baseline peer-quality. However, due to time constraints this was not pursued further at this time.

A concern raised by several referees was that the follow-up survey might not be representative of the original sample because the response rate was only about 50 percent. This was acknowledged in the revision, even though for marginal candidates the response rates were very similar.

Finally, several referees wanted to see an expanded chapter spelling out the policy implications as well as additional results tables and summary statistics. These changes have all been implemented.

**4. Confirmation by the Main Referee that changes have been done to the satisfaction of the referees and final recommendations**

About one month after the defense, the candidate submitted the revised manuscript to the committee members along with a point-by-point response to the comments and questions from the defense. The committee members 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, together with a plagiarism check, and told the candidate to add a few minor revisions. On February 22, 2023, the final version was submitted, and the main adviser found it satisfactory.

The doctoral dissertation review committee recommends that GRIPS award the degree of Ph.D. in Development Economics to Mr. Chien LE QUANG.