

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 LITSCHIG Stephan

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	Abinash Dash		
学籍番号 ID Number	PHD16201		
プログラム名 Program	Policy Analysis Program		
審査委員会 Doctoral Thesis Review Committee	主査 Main referee	LITSCHIG Stephan	主指導教員 Main Advisor
	審査委員 Referee	ESTUDILLO Jonna P.	副指導教員 Sub Advisor
	審査委員 Referee	山内 慎子/ YAMAUCHI Chikako	副指導教員 Sub Advisor
	審査委員 Referee	家田 仁/ IEDA Hitoshi	博士課程委員会委員長代理 Acting Chairperson of the Doctoral Programs Committee
	審査委員 Referee	重岡 仁/ SHIGEOKA Hitoshi (Associate Professor, Simon Fraser University)	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	Impact of Financial Incentives, Awareness, and Access to Health Facilities on Mortality and Health Services Utilization: Evidence from India's National Rural Health Mission (NRHM) 医療機関へのアクセス、金銭的インセンティブ及び利用者意識が母子保健サービス利用や健康状態に与える影響:インドの National Rural Health Mission (NRHM)プログラムを用いた実証分析		
学位名 Degree Title	博士 (開発経済学) Ph.D. in Development Economics		
論文提出日 Submission Date of the Draft Dissertation	2019年6月5日	論文審査会開催日 Date of the Doctoral Thesis Review Committee	2019年7月3日
論文発表会開催日 Date of the Defense	2019年7月3日	論文最終版提出日 Submission Date of the Final Dissertation	2019年8月21日
審査結果 Result	<div style="display: flex; justify-content: space-around;"> 合格 Pass 不合格 Failure </div>		

※ 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.**

Abinash's dissertation provides the first comprehensive evaluation of India's flagship government program for improving child and maternal health and to meet health-related MDGs. The National Rural Health Mission (NRHM) accounts for more than 50% of the ministry of health budget and was launched in April 2005. It includes three main components: information provision through community health workers, financial incentives for institutional delivery and expansion of physical health care infrastructure. The three components were rolled out by different agencies and at different points in time across districts.

Despite the importance and scale of the program, existing studies have only focused on the financial incentive component in its early stages. Impact evaluation studies of community health worker interventions on health outcomes tend to be of limited scale and run by NGOs, not governments. Studies on impacts of availability of physical health infrastructure on health outcomes cover mainly developed countries and Africa. Perhaps most importantly, no other study on large-scale child health interventions has investigated the interaction of demand and supply program components. For example, the effectiveness of cash incentives for institutional delivery may depend crucially on the availability of delivery services.

The dissertation is based on three rounds of individual and household level microdata and one round of a facility survey conducted by the Indian government. Drawing causal inferences from comparing individuals who benefited from a given program component to those who did not is notoriously challenging. The empirical design instead exploits variation in component coverage at the district level, i.e. it is a comparison of individuals based on whether they reside in districts with high vs. low coverage, irrespective of whether the individual benefited from a program component. The analysis accounts for time-invariant confounders at the district level by including district and time fixed effects. Importantly, there is no evidence of differential outcome trends for districts with high vs. low future coverage before program started.

The findings are broadly in line with prior work from other countries and suggest that information provision, financial incentives for institutional delivery and physical infrastructure availability all reduce infant, neonatal and one-day mortality. In terms of mechanisms, there is evidence that higher coverage leads to increased take-up of health facility services, such as more ante-natal visits and higher skilled birth attendance as well as increased breastfeeding in the initial hours after birth. The results also suggest that mothers substitute away from private towards public facilities for giving birth. Finally, the interaction analysis shows that the financial incentive for health facility births has worked as a substitute for - rather than a complement to - health facility availability.

The thesis defense went well. The candidate gave a clear presentation and responded well to questions. For example, one reviewer asked about potential reasons for the switch from private to public delivery facilities. Abinash explained that even though the woman is paid cash regardless of the type of facility, the community health worker only gets paid when the woman gives birth in a public facility. He also acknowledged this as a program design flaw.

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

The members of the committee agreed that the substantive contribution of the thesis fulfils the requirements for the PhD. At the same time, several referees had additional questions about the institutional context and some made detailed suggestions for re-organizing some of the chapters.

The most important comments were as follows:

1. The first chapter merely replicates and extends an existing study using more updated data. There is low level of originality in terms of topic, methodology, and dataset.
2. There was no mention on whether the financial incentive applies universally to all women (or is there a targeting?)

3. To pin down causality you need to assume that changes in average outcomes at the district level would have been the same across more or less exposed districts in the absence of the program.
4. Given that the three components were concurrent, it would be better to examine the effects of the three components simultaneously.
5. You find that the impact on boys is larger. This might reflect the fact that their mortality rate is biologically higher (thus more room for reduction).
6. 4/5 of women are aware of financial incentives but take-up rate is not high despite the large benefit to infant and mother found in this paper. Is this due to travel cost or lack of trust to public facility?
7. In the regression analysis, the reason of the variable selection might be more reasonably explained (especially about social infrastructure like fresh water, transport and electricity....)
8. Quality of medical services/facilities/equipment's/medicines might influence the output variables. The author is expected to comment on this point in the thesis.

The committee decided that the suggested revisions should be checked by the main referee.

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

Abinash submitted his revision on August 21 2019 and the main advisor 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 Development Economics to Mr. Abinash Dash.