

Research Degree Examinations – PhD Post-Viva Final Report

DEGREE OF DOCTOR OF PHILOSOPHY

Examiners are asked to complete and submit a joint report and list of corrections, if applicable after the viva. **The joint report should normally be completed on the day of the oral examination.** The report and any list of required corrections should be provided to the Postgraduate Research Service within ten working days of the viva.

Name of Candidate:	Till Seuring	Candidate Number	100033284
School:	MED		
Full Title of Thesis:	The economics of type 2 diabetes in middle-income countries		
Name of Examiners:	Dr Bereket Kebede	Internal Examiner	
	Professor Eric Brunner	External Examiner	
Date of Viva Voce Examination:	1 November 2016	Category A Candidate inc. Staff	No

Report Details

Please provide a brief report and comment on each of the sections. It is unnecessary to supply a description of the thesis, except where it would provide clarity about specific points you wish to make.

General Comments

Please comment on the candidate's performance in both the thesis and the viva. If there is a discrepancy between the preliminary and final reports this should be discussed.

The thesis is an important contribution to the health economics literature on type 2 diabetes. Different methods of empirical analysis are competently implemented and the presentation is very clear. In addition, the candidate performed very well during the viva intelligently and knowledgeably responding to the queries raised by the examiners. The examiners jointly recommend "Pass subject to Corrections". A list of revisions are provided separately and the internal examiner will check if they are implemented when the thesis is finally submitted.

Are you satisfied that the thesis is the candidate's own work?

If "No" please suspend the viva and consult the Instructions to Examiners, Section 11.

Yes.

Has the candidate shown the ability to conduct original investigation to test ideas, whether the candidate's own or those of others?

Yes.

Does the candidate's work show evidence of studying the subject of the thesis with adequate industry and application?

Yes.

Has the candidate shown an understanding of how the thesis topic is related to a wider field of knowledge?

Yes.

Does the thesis represent a significant contribution to learning (at the level of the degree) and if appropriate to the field contain matter worthy of publication?

Yes.

Are the presentation, style and general arrangement of the thesis satisfactory?

Yes.

Were the results of the viva satisfactory?

If NO please detail below.

Yes.

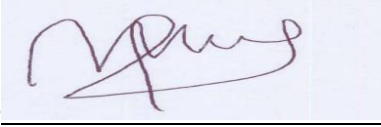
Please comment on the comparability of the standard of the candidate's work with work you have examined or supervised at other Higher Education Institutions

Above average.

Joint Final Recommendation of the Examiners

Please clearly identify which recommendation is being made in the box next to the recommendation and for multiple options please delete those which do not apply. Where the examiners cannot agree a recommendation each should complete a separate form and return both to the PGR Service team.

<p>Pass (No Corrections)</p> <p>The candidate has achieved the criteria for the award of the degree of Doctor of Philosophy. Any minor typographical errors detected by the examiners should be corrected before final submission.</p>	
<p>Pass subject to Corrections</p> <p>The candidate has achieved the criteria for the award of the degree of Doctor of Philosophy, subject to the completion of minor corrections to the thesis to the satisfaction of Bereket Kebede, within a period of six months from the notification of the candidate by the PGR Service.</p>	√
<p>Referral for Resubmission (available at first submission only)</p> <p>The thesis in its current form does not achieve the criteria for the award of Doctor of Philosophy but there is reason to believe that the thesis could be revised to meet the criteria if the candidate were to be given a period of twelve months (from the notification of the candidate by the PGR Service) for revision.</p> <p>The thesis in its current form achieves the criteria for the award of Master of Philosophy and the candidate should be given the option of submitting a revised thesis or of being recommended for the Degree of Master of Philosophy</p> <p>(i) — Without corrections. Any minor typographical errors detected by the examiners should be corrected before final submission</p> <p>or</p> <p>(ii) Subject to the completion of minor corrections to the satisfaction of _____ (name of examiner), within a period of three months from the notification of the candidate by the PGR Service.</p>	
<p>Fail but meets the criteria for MPhil</p> <p>that the candidate has not met the criteria for the award of the degree of Doctor of Philosophy, and should not be allowed to submit a revised thesis, but has met the criteria for the award of Master of Philosophy and should be recommended for the award of the degree:</p> <p>(i) — Without corrections. Any minor typographical errors detected by the examiners should be corrected before final submission</p> <p>or</p> <p>(ii) Subject to the completion of minor corrections to the satisfaction of _____ (name of examiner), within a period of three months from the notification of the candidate by the PGR Service.</p>	
<p>Fail</p> <p>That the candidate has not met the criteria for the award of Doctor of Philosophy or the criteria for the award of Master of Philosophy and should not be given the opportunity to submit a revised thesis.</p>	

Signature 

Print Name: BEREKET KEBEDE

Date: 1 November 2016

Signature 

Print Name: ERIC BRUNNER

Date: 3 November 2016

Endorsement of the recommendation above by the School or Institute Director of Postgraduate Research,
acting on behalf of the Head of School:

Signature..... Date

Print Name.....

Or for a Category A candidates including Staff:

Endorsement of the recommendation above by the Academic Director of Research Degree Programmes:

Signature..... Date

Print Name.....

List of corrections

The thesis is an important contribution to the health economics literature on type 2 diabetes. While all the chapters fulfil the standard of a PhD thesis, the examiners were particularly impressed by the methodological contribution of Chapter 5.

The following are the specific revisions:

1. Even though the thesis is generally well-written, additional editing to root out remaining spelling, grammatical and formatting errors is required. The internal examiner has provided a hard copy of the thesis with some errors identified. The candidate is advised to go through the thesis carefully and edit before submission.
2. Given the results from the empirical chapters, the first objective of the thesis should be rephrased. The Abstract may need to be reworded to reflect this change.
3. Chapter 2: The reason for comparing direct and indirect costs should be clarified (e.g., pp. 43-45). In addition, the role of existing health infrastructure and measurement problems of capturing indirect costs should be better discussed.
4. Chapter 2: The discussion about 'willingness to have treatment' on p. 68 seems to confound preference with ability (e.g., a rich person may 'prefer' not to take treatment even though s/he is able to do so).
5. Chapter 3: Clarify how formal and informal sectors are defined. For example, it is not clear where semi-subsistence agriculture is included. It is also good to clarify how employment, wages and hours worked are measured for different sectors.
6. Chapter 4: Is recall bias really a problem? It is unlikely that people will forget about a diabetes diagnosis since it is a major event.
7. Chapter 5: Include more explanation of marginal structural model. You don't need to include a technical and long description but just enough to clarify the basic method behind the model.
8. Chapter 5: The assertion that regression-discontinuity design (RDD) models provide results that are only relevant for observations around the threshold (p. 135) is not necessarily right. This depends on the distribution below and above the threshold and RDD's relevance depends on the nature of the distribution. Hence, it is better to rephrase the statement.
9. Chapter 5: A large data set doesn't necessarily reduce potential measurement errors; please rephrase the sentence that implies that on page 136.
10. Chapter 5: What proportion of the data set was imputed? What does 'thirty imputed data sets were created' mean (p. 142)? Please clarify.
11. Chapter 5: In the diagram for the fixed effects model on page 143, the horizontal arrows seem to capture lagged effects; but standard fixed models do not do that. This should be clarified or the figures should be changed.
12. Chapter 5: The presentation of the figures on pages 151-153 should be arranged to help comparison. Since the main comparison is between the results from the marginal structural and fixed effects models, it is better to present the results for each outcomes from the models side-by-side. The interpretation of

the graphs should also take the confidence intervals into account; make sure that the confidence intervals do not cut across the zero line. Also clarify whether these figures are drawn after controlling for other factors.

13. Chapter 6: The discussion of policy issues and potential policy recommendations is excessively focused on the health care sector and should be embedded into wider contexts. For example, clarify how the recommendations and suggestions can be facilitated or constrained by the wider structural problems in society at large. There needs to be at least a couple of paragraphs outlining the implications of the labour market findings which suggest that a diabetes diagnosis may lead to employment discrimination. Although there are other possible explanations for the findings, it is likely that workers in manual occupations in LMICs newly diagnosed with diabetes may be vulnerable to partial or total loss of income. Also embed the discussion within the wider disease burden and health infrastructure; note society has other disease burdens than diabetes and health facilities cater for all ailments.

While the above comments should be considered in the revision of the thesis, the examiners would also like to provide additional comments that will hopefully help the candidate publish his thesis. Note you don't need to consider the following comments for the revision of the thesis.

1. Most of the regressions in the thesis are done on disaggregated data for males and females. It is better to conduct formal tests like Chow's test whether the regression should be done on pooled or disaggregated data (whether there is structural difference between the two). If the formal tests support pooled regressions, dummy variables for males and females can be added to capture heterogeneity.
2. It is good practice to formally test for differences between coefficients across different regressions (cross-regression tests). For example, coefficients from regressions for females and males should be compared using formal statistical tests.
3. Chapter 4: The reason for excluding pregnant women from the regressions is not clear. Pregnant women are not randomly selected people, and their exclusion may bias the sample. One alternative is to include them but also include an indicator variable for pregnant women.
4. Chapter 4: The hours worked and wage equations do not control for selection into employment. Using a selection model like Heckman selection for these regressions is advisable.
5. Chapter 5: The outcome variables included in the different regressions are of very different nature (e.g., p. 148). Factors that explain probability of employment, smoking, alcohol consumption, BMI, etc., are very different from each other. Using the same models to explain all of them may not capture these differences. For example, smoking and alcohol consumption are related to addiction which may be better explained by habit formation models that are significantly different from models required to explain other outcomes.