## CONTENTS

List of Figures vii  
List of Tables viii

1 Introduction 1  
  1.1 Introduction .................................................. 2  
    1.1.1 What is community-based health insurance? ............ 2  
    1.1.2 The evolution of community-based health insurance .... 3  
  1.2 The problem statement .......................................... 6  
  1.3 Research objectives ........................................... 7  
  1.4 Conceptual framework: pathways from health insurance to improved health outcomes ......................... 7  
  1.5 Study area in the broader context ............................. 9  
    1.5.1 Health and development in Uganda ........................ 9  
    1.5.2 Health sector governance under decentralisation .......... 10  
    1.5.3 Health financing in Uganda ............................... 12  
      1.5.3.1 The landscape of health insurance in Uganda ....... 13  
      1.5.3.2 Coverage of private health insurance ............... 14  
      1.5.3.3 Community-based health insurance in Uganda ....... 15  
      1.5.3.4 The study area: A brief history of Kigezi .......... 16  
      1.5.3.5 Kisii Hospital Community Health Insurance Scheme 18  
  1.6 Sampling strategy and data collection ......................... 22  
  1.7 Ethical considerations ......................................... 24  
  1.8 Some assumptions and caveats of this research .............. 24  
  1.9 Further organisation of the dissertation .................... 27

2 What Determines Enrolment in and Renewing of Community-based Health Insurance in Rural Uganda? 29  
  2.1 Introduction ................................................... 30  
  2.2 Enrolment in health insurance in developing countries. .......... 31  
  2.3 Empirical approach ............................................ 33  
  2.4 Results ...................................................... 35  
    2.4.1 Descriptive results ................................... 35  
    2.4.2 Empirical results ................................... 36
2.4.2.1 Determinants of enrolment in CBHI. 36
2.4.2.2 Determinants of staying in CBHI 37
2.4.2.3 Effect of perceptions on enrolment and staying insured. 40
2.5 Discussion and conclusions 41
3 Impact of Community-Based Health Insurance on Child Health Outcomes: Evidence on Stunting. 44
3.1 Introduction 45
3.1.1 The stunting problem 46
3.2 Health Insurance and Health Outcomes in Developing Countries: State of the Art 47
3.3 The empirical strategy 49
3.3.1 Treatment and control variables 49
3.3.2 Identification strategy: Two Stage Residual Inclusion estimator 50
3.3.3 The empirical model specification 51
3.3.3.1 A review of the instruments used in health insurance studies 52
3.3.3.2 Our instruments 52
3.4 Results 56
3.4.1 Descriptive results 56
3.4.1.1 Health facilities’ data 56
3.4.1.2 Household survey data 57
3.4.2 Empirical results 58
3.4.2.1 Main model results 58
3.4.2.2 Some heterogeneous treatment effects 62
3.4.2.3 A comment on breastfeeding results 63
3.4.3 Robustness checks 65
3.5 Discussion and conclusion 66
4 Effect of Community-Based Health Insurance on Preventive Health: An Analysis of Self-reported Use of Preventive Health Interventions. 69
4.1 Introduction: Community-based health insurance and preventive health 70
4.1.1 Preventive health in Uganda 71
4.2 Preventive health and strategies for uptake in developing countries 72
4.2.1 What is preventive health and why is it important? 72
4.2.2 Disease burden from preventable illnesses in developing countries 73
4.2.3 Low uptake of preventive health strategies 73
4.2.4 Improving uptake of preventive health interventions 74
4.2.5 Effect of health insurance on preventive health outcomes 76
4.2.6 Our contribution to the literature 77
4.3 Theoretical and empirical strategy 78
4.3.1 A model of preventive health 78
4.3.2 Empirical strategy:Inverse probability weighting (IPW). 80
4.3.2.1 Selection on the observables and balancing diagnostics 80
4.3.3 Treatment and outcomes 81
4.4 Results 82
4.4.1 Descriptive results 82
4.4.2 Empirical results ......................................................... 83
  4.4.2.1 Average Treatment Effect of CBHI Participation .... 85
  4.4.2.2 Average Treatment Effect on the Treated ............. 90
4.4.3 Robustness Checks ..................................................... 91
  4.4.3.1 Weighted Least Squares regressions ...................... 91
  4.4.3.2 Nichols (2008) Weighting Strategy ................. 91
  4.4.3.3 Harder et al. (2010) weight stabilisation and trimming . 92
4.4.4 Pathways of Impact ................................................... 93
4.5 Conclusions ................................................................. 97

5 Conclusions, Policy Recommendations and Suggestions for Future Research 99
  5.0.1 Main findings ......................................................... 100
    5.0.1.1 Determinants of CBHI enrolment ..................... 100
    5.0.1.2 Effect of CBHI on child stunting ................... 101
    5.0.1.3 Effects of CBHI on the utilisation of preventive health
             services and strategies .................................. 102

A Appendices 104
  A.1 Supplementary Tables to Chapter Three ....................... 104
  A.2 Supplementary Tables to Chapter Four ....................... 108
  A.3 Procedure for the imputation for birthweight .......... 114

Bibliography 120