**IMPACT OF VALUE-ADDED SCHOOL LEAGUE TABLE IN UGANDA**

**Pre-Analysis Plan**

**May 2017**

1. **Introduction**

This plan outlines the hypothesis to be tested and specifications to be used in the analysis of the impact of a new secondary school league table published in Uganda in September 2016. This plan has been developed before data was collected and analysed following the intervention and provides a reference to evaluate the final results of the study.

The plan is structured as follows: Section 2 outlines the motivation for the study, the sample selection and data sources; Section 3 outlines the main hypothesis to be tested in the study; Section 4 outlines the specification to be used in analysing the data.

1. **Overview of the study** 
   1. **Motivation and programme summary**

This study takes advantage of a natural experiment in Uganda to investigate the impact of secondary school league tables on school choice.

The role of information on education performance is a widely-discussed topic in the development sector. Without accurate information on the academic performance of schools, it is difficult for parents and students to make informed decisions on school choice, hold their schools to account, or lobby policymakers to make improvements.

For this reason, information plays a key part in social accountability theory which argues that transparent performance information can drive citizens to use their voice to support or challenge service providers (such as schools) to improve. Over the past 15 years there has been a wave of experimentation to see how increased transparency through school report cards or leagues table might lead to improved accountability amongst school users. Although there is a growing body of research in this area, evidence is mixed and the effectiveness is unclear.

In 2016, the Ministry of Education in Uganda shared a new national ranking of secondary schools based on value-added scores with one of the country’s leading newspaper publications, The Daily Monitor. In September 2016, the newspaper published a league table listing the top 100 secondary schools on the front page alongside case studies and quotes from some of the featured schools.

Using a regression discontinuity design, this research project aims to investigate the impact of this league table publication on school choice by comparing interest and enrolment in these schools before and after publication, as well as comparing against similar schools, which had very similar performance results but did not appear in the newspaper as they were just above the cut-off point.

* 1. **Sample selection and assignment of treatment**

The evaluation sample consists of 200 secondary schools: 100 schools appeared in the newspaper league table (treatment group) and 100 did not (control schools).

Assignment to the treatment group was based on the school’s ranking, with schools ranked 1-100 in terms of their average value-added score assigned to the treatment group and schools ranked 101-200 assigned to the control group.

* 1. **Key data sources**

The primary data sources for this study include central government data on school performance and general school characteristics and a post intervention telephone survey with school leaders to understand application and enrolment data:

* School results from the Ugandan Certificate of Education (a national examination taken at the end of lower secondary school), obtained from the Ugandan National Examination Board (UNEB).
* Application and enrolment data: obtained from structured telephone interviews with school leaders conducted in June 2017, approximately nine months after the intervention.
* School characteristics data (i.e. school type, school location, fees, etc): obtained from the Ministry of Education and Sport’s national EMIS and through the structured telephone interviews with school leaders.

1. **Hypothesis**

Main hypothesis: Positive school performance data presented via newspaper league tables influences decisions on school choice, as measured by increased applications and enrolment.

The key outcome of interest here is school choice, which will be measured by the change in the number of applications and enrolment of students before and after intervention in comparison with the control group.

The causal chain and mechanism: the impact of school performance data depends on how widely it is shared with school users (i.e. if the league table is actively disseminated and emphasised by school leaders as measured by question 7) and if the information is new (if schools had not appeared in Division 1 league tables previously, as measured by question 16 and 17).

1. **Estimation of treatment effects**

This study adopts a regression discontinuity design.

* 1. Key Variables

Outcome: The key outcome variables will be the change in the number of applications and change in the number of new enrolments.

Treatment variable: A binary indicator for whether the school is in the top 100.

Running variable: The school value-added score, a continuous variable.

Covariates:

* + school type (public USE, public non-USE, private USE, private non-USE)
  + school fees
  + proportion of boarders
  + distance to nearest secondary school
  1. The treatment effect equation to be estimates will be

in which the outcome Y for school s is a function of a binary treatment indicator T, the continuous running variable VA (with a flexible polynomial functional form), and a vector of covariates X

* 1. Survey response
* The survey team will aim to keep the response rate as high as possible by rearranging telephone calls at the convenience of the interviewees.
* The response rate for interviews will be reported and a binary choice model will be run to test whether schools that do and do not respond differ on any measured characteristics.