

## Development Economics - Homework 2

Download the Nigerian General Household Survey collected in 2010 and all the available documentation from

<http://go.worldbank.org/403AV6A6D0>

Registration is free and immediate.

The purpose of this homework is threefold.

1. Study the survey documentation briefly describe the survey content and purpose and discuss in some detail the sample design (max 1 page)
2. By using STATA produce the following summary statistics focusing on the rural sector only
  - (a) number of observation by geographical zone (table)
  - (b) age distribution by gender (graph)
  - (c) by using information about individual relationship with the household head, describe the composition of the typical rural household
  - (d) for those individuals who declared of having completed their education, tabulate the distribution by gender for each “highest qualification attained” (table)
  - (e) focus on the childs of the household head. Basing on their birth date, first determine their order of birth and next generate a bar chart which relates “highest qualification attained” to the order of birth.
  - (f) generate an index of financial access at the household level by considering people access to saving and loans institutions, both formal or informal. Precisely count how many household members had any given saving/borrowing relation, sum-up over types of relation and divide by the number of adult household members. How is this index distributed across geographical zones? Is there any relationship of this index with the household head’s education?
  - (g) by using data on crops and plots, generate two indices of crop diversification at the household, namely the Herfindal Index  $H = \sum_i p_i^2$  where  $p_i$  is the share (between 0 and 1) of total household land under the i-th crop (disregard crops whose  $p_i$  is less than 5 percent if the case) and the Simpson’s Reciprocal Index  $SDI = 1 - 1/\sum_i p_i^2$ . Generate a bar chart with report the average  $H$  (resp.  $SDI$ ) for each geographic zone.
3. Regress each index of crop diversification on the index of financial access (at the household level). Select and include appropriate controls (inspire yourself from the papers we have discussed in class). By using the STATA command OUTREG2 produce print-quality tables of the estimates and discuss results.

**Note:** this homework requires you preliminary get some familiarity with STATA, especially so about merging datasets (MERGE command), create tables of summary statistics (e.g. TAB, SUMMARIZE, TABLE, TABSTAT commands), generating variable (e.g. GEN and EGEN commands), the prefix BY and the command COLLAPSE. I advise you use the help facility provided in STATA and, in case, introductory manuals and handouts freely available in internet. Points 2a-2e are rather simple and proposed especially for training purposes. We will also have one lecture devoted to STATA next Tuesday Feb. 7th. Points 2f-2g and 3 are more demanding. Start working on this homework as soon as possible.