

literature is very large and is rapidly growing, and I cover only a small selection of the many possible topics. Section 2.3 provides an introduction to non-parametric techniques for estimating density functions, regression functions, and the derivatives of regression functions. Although non-parametric analysis typically requires a great deal of data, there are a number of questions in development economics that are susceptible to a non-parametric treatment using survey data.

I. Data for development economics

1.1. Household survey data

1.1.1. Content and purpose

There are few Less Developed Countries (LDCs) that have not collected survey data of some sort at some time, and many LDCs have multiple surveys that are run on a regular and continuing basis, many of which meet the highest international standards of data collection, editing, and publication of results. Many (perhaps most) of these surveys have a specific *raison d'être*; household expenditure surveys are used to monitor living standards or to collect weights for the consumer price index, labor force surveys are used to estimate unemployment rates, and censuses to estimate total population. Other surveys, such as surveys of firms or of farms are used to collect production or output data, and use a unit of observation other than a household. In many countries, the statutory authority establishing each survey is explicit about its purpose, and official statisticians design the surveys with these aims in mind. Of course, once the data are collected they can be used for many other purposes, to which they may be more or less suited, and to which government statistical offices may be more or less sympathetic. In the last ten to fifteen years there has been a great expansion in the use of survey data in development economics — as in other branches of the profession — much of it a consequence of better computing facilities, and much of it attributable to the increased willingness of statistical offices around the world to release their data to researchers. Ministers and civil servants are realizing that they have relatively little to fear from econometric analysis, and perhaps something to learn.

The difference between the original statutory purposes of the surveys and the uses to which the data are put in development economics poses a number of problems. In the short run, there are various statistical issues associated with using data for purposes that are different from the original intent and design, and in the longer run, there is the more fundamental (and much more difficult) question of how surveys ought to be redesigned for the broader policy and