

**Introduction**

Almost all the tools of econometric analysis that have been used in empirical work in economics in general have also been applied to the specific problems of economic development. My choice of topics in this review is therefore to some extent arbitrary, although I have been guided by three considerations. First, there are a number of methods that are so widely encountered in the development literature that they demand some coverage, even when their use raises no issues beyond those encountered in a good standard text. Second, I have been led by the first section of the chapter, on data questions, since discussion of data frequently leads naturally into econometric technique. Third, I have followed much of the recent general econometric literature in emphasizing robustness of inference and estimation. Much recent theoretical work has been devoted to methods that allow applied workers to dispense with unnecessary supporting assumptions, so that, for example, standard errors can be calculated even when standard textbook assumption fail, simultaneity and selection bias can be allowed for without making arbitrary and often incredible assumptions, and key effects can be measured with minimal assumptions about functional form. In keeping with the balance of the development literature, I have chosen to emphasize microeconomic more than macroeconomic applications, although I have included a section on recent results in time-series analysis and their application to problems of economic development.

The plan of the chapter is as follows. Section 1 is concerned with data, and Section 2 with tools and their application. However, since many of the data issues lead directly into the econometrics, I have sometimes found it convenient not to make the separation, and to include both in Section 1. The first and largest part of Section 1 deals with household survey data, with survey design in developing countries, with data collection, with measurement issues, and with the experience of using such data in econometric analysis. Section 1.2 is concerned with national income accounts, and with the index number and other problems that underlie international comparisons of income levels and growth rates. I also give some attention to the quality of country data, looking beyond national incomes to demographic, trade, and other measures.

Section 2 turns to econometric tools. There are three main sections. Section 2.1 is mainly concerned with tools for microeconomic analysis, emphasizing the use of survey data. I work through a range of more or less familiar econometric topics, illustrating their uses in the development literature, discussing methods for strengthening the robustness of inference, and trying to identify common pitfalls and difficulties. Section 2.2 turns to time-series techniques and their uses in the analysis of development questions. The modern time-series