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PRODUCING SMALL AREA ESTIMATES FROM NATIONAL SURVEYS: METHODS FOR MINIMIZING USE OF INDIRECT ESTIMATORS

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ABSTRACT

National surveys are usually designed to produce estimates for the country as a whole and for major geographical regions. There is, however, a growing demand for small area estimates on the same attributes measured in these surveys. For example, many countries in transition are moving away from centralized decision-making, and western countries like the United States are devolving programs such as welfare from Federal to state responsibilities. Direct estimates for small areas from national surveys are frequently too unstable to be useful, resulting in the desire to find ways to improve estimates for small areas. While it is always possible to produce indirect, model-dependent, estimates for small areas, it is desirable to produce direct estimators where possible. Through stratification and oversampling, it is possible to increase the number of small areas for which accurate direct estimation is possible. When estimates are required for other small areas, it is possible to use forms of dual-frame estimation to combine the national survey with supplements in specific areas to produce direct estimates. This article reviews the methods that may be used to produce direct estimates for small areas.

KEYWORDS: Direct Estimation; Dual-Frame Estimation; Oversampling; Small Area Estimation; Stratification.

The actual paper can be found in the December 2001 issue of *Survey Methodology*, pages 183-188.

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