

and the data banks, it seems relevant to ask whether any one single person can avoid inclusion in one or more data banks? Is one of the prices of "welfare statism" and a modern and high technology-based society that no single person can escape one or more data banks? Is a further price that individuals in modern society will increasingly relinquish their claims to privacy as these claims have pertained to the linkage of government records? Have citizens already and largely foregone their claim to privacy?

With the evolution of modern data banks, and with the evolution of entitlement and tax

collection programs, will the day come, perhaps in one or several generations, when statistical collection will be largely replaced, as it is currently known and understood, by the widespread use of satellite communications systems, data banks, universal and unique record keys, and so on? While this may sound like science fiction today, it is probable that statistical collection will undergo significant changes in the next one or two generations and that an ARC, however ill-advised it may seem today, will be the way to undertake censuses in the future along with virtually all other kinds of statistical collection.

REJOINDER

We would like to thank John Leyes for providing such excellent comments on some of the limitations which are apparent in an Administrative Record Census (ARC).

Administrative record environments are not alike as evidenced by the Canadian and American systems. Therefore, some of the concerns John raises differ in importance, depending on the country in which one tries to implement the idea. For this reason, we thought it might be appropriate to clarify some of the issues he raises.

Coverage of the Population

John rightly calls attention to the need for a protest of the reliability of administrative records as (even) a partial substitute for a conventional census. Because of this need for testing, we agree that it is highly unlikely that an ARC population approach could be conducted in the United States in 1990 on anything other than a trial basis. Furthermore, changes in the conventional 1990 census would probably be needed in order to make the testing workable--for example, asking for Social Security Numbers (at least on a sample basis).

Characteristics of the ARC Population

The administrative record systems that would be employed in an ARC effort are not of uniformly high quality on demographic and economic variables. Some research has been conducted, however, on the quality of the more important variables in such systems--like, for instance, the CPS-IRS-SSA Exact Match Project [1]. It appears that, while the concerns John raises are partly justified, the content errors in administrative records may be comparable to--and, possibly in some cases, even smaller than--those that would be encountered in a conventional population enumeration. The big problem with the ARC is that the concepts used for administrative purposes do not relate closely to those employed in past censuses.

Geographic Location of the Population

Perhaps the most important concern that many of us have about the population census (aside from the basic coverage question, itself) is the quality and codability of geographic data.

In our work at the Internal Revenue Service and the Social Security Administration, we have experienced many of the same kinds of problems with mailing addresses that John points out as existing in Canada. We agree, also, that, even if a nine-digit zip code becomes part of each address, there will still be many problems to overcome. Perfecting addresses in the United States for tax and program administration purposes (e.g. mailing social security checks) is something that goes on routinely, at present; however, the quality of these administrative programs is probably not, in our opinion, sufficient to be relied on in order to conduct an administrative record census. Unquestionably, therefore, it will be necessary to spend additional resources to improve this address information.

In our paper, we have mentioned two procedures, among the many that will be needed, that will undoubtedly be quite expensive. One of these is to repeat, as was done for 1980, questions on the individual income tax return about the taxfiler's residential address (as distinct from his or her mailing address). A followup with Social Security and Medicare beneficiaries on residential addresses also seems needed.

Longer View of an ARC

We agree that a longer view of our proposal may be needed to put it in the proper context. We think, however, that the technology already exists to carry out the proposal we have made (at least for the U.S. administrative record systems mentioned in the paper). Spectres of 1984 are clearly a big concern and, indeed, a compelling criticism of the approach we describe; however, administrative programs

already exist that undertake most of the data linkages called for in the paper. Nonetheless, the concerns about privacy and confidentiality, which John raises, are ones that all Western democratic societies will need to examine and monitor continuously.

Concluding Comment

Whether or not there should be a major reliance on the use of administrative records for a population census, it seems clear to us that a planning strategy centered on this idea may well be worth considering, in any case. It could very well lead, for example, to improvements in the intercensal estimates programs--even to measures of employment and unemployment with lower mean square errors [2]. The intended focus of our paper was to provide

enough background so that a meaningful ARC research agenda might emerge. John's comments have certainly furthered our purpose and, for that, we thank him again.

REFERENCES

- [1] Kilss, Beth and Scheuren, Frederick J. "The 1973 CPS-IRS-SSA Exact Match Study." Social Security Bulletin, October 1978, pp 14-22.
- [2] Scheuren, Frederick, Oh, H. Lock, Vogel, Linda, and Yuskavage, Robert. "Report No. 10: Methods of Estimation for the 1973 Exact Match Study." Studies from Inter-agency Data Linkages, January 1981.