DISCUSSION

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In reviewing the papers from this session, I found myself continually making comparisons to our situation at Revenue Canada Taxation. I shall thus orient my comments from that perspective. Before discussing selected papers, I would like to outline briefly our organization. The Statistical Services Division of Revenue Canada Taxation is an organization somewhat equivalent to the Statistics Division of IRS having the following main functions:

(1) The development of statistical data bases, tabulations and publications on taxfilers in Canada (individuals, corporations, trusts, charities, etc.);
(2) The development of tax simulation models;
(3) The provision of services in the field of quantitative analysis and mathematical statistics to our department (e.g. statistical sampling, modeling of operations, etc.); and,
(4) The preparation of forecasts of departmental workloads, scenarios, and environmental analysis for inclusion in the departmental long term plan.

Our division has been in operation (in one form or another) since 1945 and has had the following as major milestones:

(1) In 1946, we released our first publication.
(2) In 1968, the first tax model of the personal income tax system was developed.
(3) In 1976, we began producing long range forecasts using scientific methodologies.
(4) In 1979, our first corporate tax statistics were developed, (although statistics from corporation tax returns have been continually produced by our government statistical agency, Statistics Canada, since 1965).

This, as background, leads to my comments on three of the five papers presented in this session.

MULTI-YEAR PLANNING FOR STATISTICS OF INCOME: AN OVERVIEW

I agree that the demand for statistical data is likely to increase in the 1980's and that resource constraints on government statistical programs will continue to be imposed. The government of Canada has had a restrained spending program for several years, which has naturally affected statistics programs in the government. We have been lucky though, as our programs have not been reduced. Perhaps we have been fortunate, in that our programs were weakly funded in the first place. We have not had to implement sample reductions and other cost cutting measures as you have; perhaps because we have had a well thought out multi-year plan since 1976 which incorporated, in principle, provisions for many of our desired program changes and enhancements. I fully support IRS in developing a multi-year planning procedure.

With respect to some of the specific new programs, I offer the following comments. We have had our statistical programs fully integrated with the return processing procedures and have always made full use of the master file data in our statistical system (thus reducing duplication of data collection). However, despite the obvious efficiencies, such a move can have its drawbacks and problems as well. Procedures that exist within an administrative system can give nightmares to a statistician, and the statistical program, when part of the tax assessing function, will be of secondary priority within the field office. I am sure you are all aware of such problems.

INDIVIDUAL STATISTICS OF INCOME: ADVANCING THE CLOSEOUT DATE

This program appears to follow the T1 (Canadian equivalent of U.S. Form 1040) program except that we have never transcribed data that has always been available on the master file. Instead, the data is verified and corrected, if necessary, at the transcription stage. At this point, the data items may be redefined from an administrative definition to a statistical definition. Our preliminary statistical reports are produced and delivered by late December of each year. For the moment this time frame seems to satisfy our Department of Finance (the Canadian equivalent to the Treasury Department's Office of Tax Analysis) - although I have never met a client who did not want the data earlier.

With regard to the paper I have two specific comments which are perhaps really questions.

(1) The decision to include or exclude prior year returns in SOI analysis is an arguable point. We in Canada ignore prior year returns for statistical purposes and define our population as "current year" returns only. We feel that they are not significant (less than the 1.2% you have) and are too costly to process. We do not feel a need to go back and add prior year returns to previous data files to assemble a "tax year" data base as defined in the paper. Indeed I would suggest that unless "prior year" returns as a group change significantly from year to year, you should eliminate them as we do.

(2) The term "beyond acceptable limits" is used throughout the paper with respect to compromising reliability of the estimates. Have you defined your term? Have your major clients such as OTA defined what they feel is necessary for this purpose? Sometimes I feel that we, as statisticians, can "overkill" our programs because of reliability.

TOTAL QUALITY CONTROL FOR A CHAMELEONIC INPUT

The author stated that this paper should be useful to those who work with multi-phase and multi-location processing systems. This certainly describes our situation. Indeed, our

data collection for our individual income program is very similar to that of IRS.

Currently, our program in Canada revolves around decentralized data transcription in five tax centres. We are currently in a transition period as new tax centres are opening each year, and shifting of work takes place from the first centre in Ottawa to the new centres. Each year, we must address the problems of training inexperienced people within new organizations, as well as the retraining of experienced personnel in new procedures. In addition, within the tax centres (where transcription occurs), the field office management rotates personnel from the assessing and revenue processing areas into and out of our statistical program. Consistency between tax centres, and between years within each tax centre, is a real and evident problem for us.

Our quality control system includes preproduction planning, training, incorporation of previous year's experiences, testing of the sampling, computer editing and error detection systems, and discussions with centres, very similar to the IRS programs. At the production stage, we incorporate peer review, key-entry testing, error detection etc., again quite similar to IRS. However, to date we do not have a formal Error Measurement and Quality Assurance program. While our department does have quality assurance programs for its operations, these do not include statistical operations. We are currently studying these programs and plan to begin implementation of a statistical quality measurement program next Spring. The goal of our program will be to determine the extent of nonsampling error as well as to provide a mechanism for informing each centre of errors. It is our intention to have the sample size large enough at the tax centre level to allow reliable estimates to be made for each centre. I feel it is important to be able to provide concrete results to the tax centres in order to impress upon them the significance of errors.

In commenting generally on IRS's total quality control system, I find it very formal and perhaps seemingly cold in that everything is quite proceduralized. The implication is that perhaps a strained relationship exists between the Statistics Division and the operations in the Service Centers. I can sympathize with this situation since this problem seems to occur in all statistical operations where both data capture and control of operations are decentralized.