USE OF ADMINISTRATIVE SOURCES OF DATA
THE FINANCIAL STATEMENT INFORMATION PROJECT

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OVERVIEW

Every year, both owners of unincorporated businesses and incorporated businesses (also known as T1 and T2 filers respectively) are required to file a taxation return to Revenue Canada. While the filing date requirement for an individual owning an unincorporated business is June 15 following the calendar year, corporations must file within six months after their first fiscal year end. A fiscal year can end in any month of the calendar year.

When filing their income tax return both types of businesses are required to file an Income and Expenses statement and in addition, corporations must file a Balance Sheet as well as a certain number of schedules that allow for example, the transformation of financial information based on the books held by the business into information useable for taxation purposes. These financial statements generally include data items that are normally required and published by Statistics Canada's Annual Surveys pertaining to economic production, and financial data (including Balance Sheet information).

In the fall of 1997, Revenue Canada will start allowing (and encouraging) corporations to file their returns electronically. In addition to the T2 income tax return information, a list of the most common accounts from the financial statements will be made available to the filers to allow the reporting of financial information. Corporations that will choose to continue filing on paper will be asked to use either a software that will include the above-mentioned accounts or alternatively, a paper format version of the financial statements that will be made available by Revenue Canada.

These new rules will change considerably the statistical potential of this administrative data source.

BACKGROUND

Statistics Canada started using taxation data as a replacement for survey data in the mid-1960's. The reliance on this administrative source has increased considerably over the intervening years. Initially the use of administrative data was mostly seen as a way to reduce the response burden imposed on the small businesses. However in an environment of budgetary restraints, it also became a major contributor in the very maintenance of important statistical programs, and also a major input source for analytical and cost recovery projects such as the production of small business profiles of income and expenses and selected Balance Sheet items.

Traditionally, the process of transforming data into substantive statistical information has been a long process of data analysis, capture and editing from photocopies of a sample of non-standardized businesses' financial statements. The impact of the filing date requirement added to this paper handling and the in-house capture process has had an adverse impact on the timeliness of the data.

Revenue Canada is proposing to enter into the electronic world for the filing of financial statements and this promises to greatly reduce the need for sampling and data capture while at the same time improve both the timeliness and the quality of the information obtained.   The introduction of the Financial Statement (FSI) along with the implementation of a unique business identification number (BN)[1]   and the analysis of the data made available from the administration of the Goods and Services Tax (GST)[2] will provide Statistics Canada with additional information to produce annual and sub-annual business statistics.   This will greatly enhance our ability to produce information on production and value added for economic sectors (such as many service industries) where this kind of data is, at present, virtually nonexistent.

FINANCIAL STATEMENT INFORMATION

The Financial Statement Information (FSI) initiative started early in 1995.   One of the major objectives of this project was to allow corporations in Canada to file electronically. To make this possible, there was a requirement to standardize the content and method of filing financial statements such as the Income and Expenses statement, the Balance Sheet, and also all of the associated schedules such as for example, the Income Tax Reconciliation which is used to reconcile the book profits to the profits subject to taxation.

Electronic filing had already been introduced for individual tax filers (including unincorporated business) in 1991, and the number of filers using this method of reporting has steadily increased since reaching close to 30%(more than a million filers) for the taxation year 1995 off the universe of unincorporated business filers. As for corporations, unincorporated owners must file an Income and Expenses statement which reflects the results of their business operations for a given fiscal year.   In order to facilitate the electronic filing of this information, Revenue Canada in consultation with Statistics Canada, and other federal departments and private sector groups, has designed a TI FSI which includes several of the most commonly reported business revenues and expenses.

The same approach was used for the corporate sector. However, this time the project was much more complex since the data filing requirements is more extensive for corporations than for unincorporated business filers. As mentioned earlier, not only do they have to file a T2 return, an Income and Expenses statement, and a Balance Sheet, but they are also asked to provide additional information such as their relationships with other corporations,

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[1]   Starting in January 1997, all business required to participate in one (or more) of the following tax programs: Payroll Deduction, Corporate Income Tax, Goods and Service Tax and Importer and Exporters Tax, will have a single registration number with Revenue Canada.

[2]   The GST is a value added tax that requires business to collect a tax on their sales of goods and services. However, since they are entitled to an input tax credit equal to the amount of tax paid on their own purchases, they remit the net amount to the government. The filing frequency can be monthly, quarterly or annual depending on their volume of sales.

Canadian or foreign, and the reconciliation of their book profits to income subject to taxation, etc.

The size of this task has forced Revenue Canada to completely redesign its corporation taxation system. To do so many working groups were formed and one of them was given the task of drafting a T2 FSI and to review the content of all the associated schedules. Statistics Canada was represented in this group to ensure that at the minimum its current administrative data uses were met. Extensive consultations with private sector groups (that included accountants and software designers) and the provinces were held and are still continuing to make sure that all interested parties are given the possibility to comment on the new filing requirement.

The target implementation date for T2 electronic filing is October 1997. Revenue Canada intends to make it mandatory for the large corporations with gross revenue or assets greater than $3,000,000 while the other ones will still have the option of filing on paper. Recognizing the difference in filing complexity between these two groups as well as the distinctiveness of farm operation filers, three FSI(s) are proposed.[3] The complex FSI is intended for large corporations and will also be the one proposed by developers of accounting software prepared for corporations. It is more comprehensive as it includes most of the items that are usually provided by the large filers. Corporations will be asked to report the same kind of details that they would normally include on non-standardized financial statements so this initiative will not add to the existing level of response burden.

The Short FSI is intended for paper filers who will not likely be using an accounting software to prepare their statements. It contains fewer than 100 data items and will be presented on a form printed by Revenue Canada. Even though the level of details on the Short is quite reduced when compared to the Complex FSI, all items on the latter (as well as the items on the Farm FSI) can be mapped into the former. Finally a third FSI has been design for farm corporations because many of their items such as types of crops are very particular to their industry. A list of items for the Complex and the Short FSI is available in Appendix A while the Farm FSI items are listed in Appendix B.

In terms of population, it is estimated that 7% of all corporations (representing more than 80% of the revenue) will file the Complex FSI while 90.5% will be eligible to use the Short and 2.5% will be using the Farm one. However, among the potential users of the Short version, Revenue Canada estimates that 80% of them are already using a computerized method to prepare their financial statements and tax returns. This makes them more likely to voluntarily use the standardized statements and also to file electronically. As an alternative measure, in order to maintain equivalent reporting requirements between paper and electronic filers, Revenue Canada is proposing to data capture most of the information supplied by paper filers. This new process is scheduled to start in January 1998 and would cover all of corporations T2 returns filed since the

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[3]   In its present format the Complex FSI does not meet all of the filing requirements for Financial Institutions therefore, a fourth FSI designed specifically for these corporations is being considered.

preceding October (for taxation year 1997). As more corporations start filing electronically or using the proposed standardized forms, the costs of the capture process will be reduced substantially.

Furthermore, a similar capture plan is envisaged for the TI FSI used by the unincorporated business population. It could be implemented as early as February 1998 and would also be for the 1997 taxation year. For consistency purposes, the TI program will revise its FSI to align it with the content of the one that will be used by the T2 program. It will include most of the Income Statement items of the Short FSI.

The success of this proposal is very important to Statistics Canada because it has the potential to provide a comprehensive database on financial information for the business universe. This
initiative complements the Business Number (BN) project which ensures the availability of an industry code for most legal entities. The objective of the latter project is to simplify the communication process between the businesses and the Federal Government and in doing so, provide all the required tools to link at the business level the data coming from the four tax programs (see note 1) As part of this project, Statistics Canada has the mandate to assign and maintain an industrial classification code for all business participants.

Both projects will then provide financial statement information and industrial classification for practically all the in-scope business universe. This should dramatically reduce our requirements to survey directly for similar information, and it potentially means that most annual questionnaires will have to be reviewed in order to shift the priority towards information that are non-financial in nature and general to particular industries.

IMPACT SURVEYS OF ECONOMIC ACTIVITY

As indicated in Appendix A, many of the items appearing on the Complex and /or the Short FSI are currently collected by STC's Annual surveys. In general, surveys are primarily interested in the financial items that allow the calculation of production, value added, financial statistics by industry, and secondly in other financial items that are industry specific. Required items that are appearing on the FSI could in principle be removed from the current questionnaires and this should lead to some reduction in surveying cost as well as a reduction in the response burden imposed on businesses.

This would in fact reposition the scope of surveying activity to items that are not financial in nature and consequently not likely to be found on a financial statement thus, avoiding duplication in reporting for the business. In the long run it also means that surveys will have at their disposal a year to year historical database on financial information which would cover the whole population. This will certainly facilitate data modelling using past information but it will also help in the production of earlier preliminary estimates of economic production. The up-front capture of information in Revenue Canada plus the

possibility of creating more robust preliminary estimates based on many years of information for the whole population will certainly have a positive impact on the timeliness of the annual data produced by Statistics Canada.

The FSI initiative should also allow the production of economic estimates at finer industrial and geographical details. Not only will the data be available from the whole population (of legal entities) but also the industrial classification and the address will permit us to produce data for smaller area at a fraction of the costs that would be required to do the same in the current environment.

More importantly, it will also allow the production of estimates for areas of the economic activity that are not well covered by our current surveys. These areas, known as data gaps, often include growing services, economic activity and small business. It is also the case for other areas of economic activity, such as the construction industry where a survey existed before but had to be cancelled because of budgetary restrictions. More generally, the richness in details provided by this new database will offer many opportunities to create new customized products according to the specific needs that may be required by particular clients. By providing a universe data base covering the whole spectre of the economy, it will increase considerably the potential for economic analysis and cost recovery projects.

Finally, as mentioned earlier, the implementation of the Business Number project will provide the level of data integration necessary to create a framework that opens a whole new set of data analysis. For example, salaries and wages will be available from both the FSI and the Payroll Deductions programs and again, the Goods and Services Tax program should also be providing information on gross revenue for the same legal entity reporting, etc. This integration will help enhance the quality of the data and provide tools for editing and imputing the data reported on FSI. Furthermore, it will also increase the scope of the Central Frame Data Base (CFDB) maintained by the Business Register Division in Statistics Canada as it will increase the number of possible stratification variables for sampling purposes and, at the same time, improve on the coverage of the frame to include for the first time the non-employers segment of the business population. In the past this segment was excluded because the CFDB was exclusively based on Revenue Canada's Payroll Deduction Program for businesses with employees.

The latter paragraph points to the fact that although the completeness and the richness of the new database will certainly improve on the quality and the range of the annual economic estimates produced by Statistics Canada, preliminary manipulations and transformations will however be required in order to make this information useable for dissemination or inclusion in the current annual surveys.

CHALLENGES AND SHORTCOMINGS OF THE NEW DATABASE

As it is generally the case for all administrative data sources, the requirements for the collection of financial data for tax purposes differ somewhat from those to produce annual

estimates of economic production. For example, the time frame in which tax filers are allowed to file their tax returns to Revenue Canada has always had a negative impact on the timeliness of statistical information produced from the same source. As mentioned earlier, the primary source of delay involved the length of time required to acquire, analyse and capture the data. The introduction of electronic filing and the up-front capture of the paper filers in Revenue Canada should reduce this delay by a couple of months.

However, a more serious problem originates with the fact that while annual surveys generally require information on an April to March year basis, tax data provides financial information on a fiscal year basis which could end anywhere from January to December of a given tax year. For example, the information provided for taxation year 1995 by a corporation with a fiscal year end month of January 31 would cover only one month of 1995 and 11 months of 1994. A corrective measure is thus required here to make the data useable for surveys. In general, corporations fiscal year end month tend to be more or less evenly distributed across the twelve months of the calendar year (with a peak in December).

In addition, the information will be provided at the legal level basis while many of the STC surveys are at the establishment level.[4] While it may not make too much difference at the smaller end of the business population, the impact is significant for large corporations (with gross revenue or assets greater or equal to $3,000,000). In terms of dollars, those large businesses represent more than 80% of the gross revenue estimates but in terms of numbers they represent only approximately 7% of the population. This clearly shows that although the FSI information will be useable for most corporations (with a structure that generally includes only one establishment), it will not be able to provide all the economic characteristics required from the large and complex businesses. However, because of the high level of data integration anticipated following the implementation of the Business Number, FSI data will at the minimum be able to provide controlling totals and a profile of these large multi-establishments businesses at the legal entity level.

Another problem that surveys are faced with when using taxation derived data resides in the conceptual differences between data items reported on the financial statements and those used by Statistical programs. For example, surveys compile book depreciation, whereas unincorporated business filers are asked to report tax depreciation (Capital Cost Allowance). Also the reported gross revenue definition for tax purposes may be larger than the one employed by surveys.

Also, as it is the case with surveys, editing and imputation methods will be required to

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[4]   A legal entity has been granted by law the right to own assets and conduct business such as buying and/or selling goods or services. For example, corporations or unincorporated self-employed individuals are legal entities. An establishment is defined as one production entity or the smallest grouping of production entities for which data on value output and cost of inputs and labour used in the production are available. A legal entity can be made of one or many establishments.

account for late-filers, missing information, inconsistencies or outliers values before the data can be used. Although Revenue Canada will be applying accounting style edits to insure the integrity of each record, it does not guarantee us that most items will necessarily be reported separately by the filers. For sure there will be a variety of details offered that will depend on the design of each filer's accounting system. Some financial statements currently submitted to Revenue Canada provide a greater level of details than others and this might still occur once the FSI project is implemented.

Methodological research will be necessary to resolve these problems and, with time, the presence of a longitudinal database will certainly help when transforming data in order to meet the agencies statistical requirements. In order to use it to its full extent, the possibilities offered by this new administrative database, a sizeable initial investment will be required on the part of the Statistics Canada.

On a more general note, previous studies on profit data for Industry profiles[5] (in Canada) and the use of administrative data in New Zealand Census of Manufacturing have shown that while the collection vehicle is not perfectly suited for Statistical purposes, tax-based data can be reshaped to become a valuable source of financial information.

CONCLUSION

The introduction of Financial Statement information along with the implementation of the Business Number project and the Goods and Service Tax certainly redefines the traditional relationship of Revenue Canada as a supplier of administrative data to Statistics Canada. It creates a new partnership between the two departments whereby Statistics Canada will now assume the responsibility of assigning a common industrial codes to the business population, and Revenue Canada will become the major collector of financial data.

This will certainly impact favourably the quality, quantity and timeliness of the date while providing new challenges and opportunities. In an environment of budgetary restraints it will contribute to the maintenance of important statistical programs while at the same time, and help to further reduce the response burden imposed on respondents. It will also offer the possibility of expanding on the current sets of economic data produced by Statistics Canada in the precise time where demands for various types of information at greater details of geography and classification are increasing tremendously in the context of economic world globalization.

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[5] Purdue Roger, Profits data for Industry profiles, Statistics Canada, October 1994. This study addresses the lack of financial data in Industry profiles. Taxation files are examined as a potential source of data for industry profits.

  Bullivant, A.G. The new use of administrative data in the census of Manufacturing by Statistics New Zealand.
A description of the development and the methodology used in the integration of tax based data to survey data in their Census of Manufacturing.

In addition, it is also an answer to public pressures to make more efficient use of existing data and at the same time eliminate duplicate requests for data from various departments of the federal/provincial governments.

Over the next few years, Statistics Canada will be working on the integration of this new standardized Financial Statement Information source in its various statistical programs. In a year from now, we hope to be able to report on the status of the progress made and in the meantime, we would appreciate receiving feedback from the member countries that are involved in the same kind of exercise.