

TAX DATA USE FOR BUSINESS SURVEYS IN STATISTICS NEW ZEALAND

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ABSTRACT

Statistics New Zealand has been using tax data for business surveys to reduce compliance costs. We gained the smaller sample size and better accuracy than normal sample design with an introduction of tax data stratum in the business surveys. We are not collecting data directly from small businesses belonging to tax data stratum. At the moment we are developing a replacement of size indicators in Business Frame using tax data instead of using direct survey information.

ACRONYMS: Statistics New Zealand(SNZ), Inland Revenue Department(IRD), Business Frame(BF), Goods and Services Tax(GST), Pay As You Earning(PAYE), Employer Monthly Scheduler(EMS), Fulltime Equivalent Employee(FTE), Annual Enterprise Survey(AES), Quarterly Manufacturing Survey(QMS).

1. INTRODUCTION

SNZ has been working on a strategy, to reduce compliance costs in the business surveys. The tax data is a reliable source of financial information for business without collecting data directly from businesses, but we had not been using the basic information like business contact and activity from IRD due to lack of timeliness. Rapid improvement in computer systems now enables us to make use of most IRD information including financial data because of improved timeliness. SNZ business survey strategy is moving to use of partially indirect surveys using administrative data for some industry groups rather than fully direct survey(collecting data directly from businesses) in order to manage respondent load, especially for small businesses.

In the latest sample redesign, both the AES and QMS introduced a tax data stratum scheme to collect full information from tax data rather than direct surveying. The tax data stratum is made up of small and simple businesses to which they contribute a small proportion to total estimation but a significant proportion of the number of businesses.

2. USEFUL TAX DATA IN NZ

In 1986, NZ introduced a new GST tax system and this has played an important role for the tax system. It taxes, at a single rate, most supplies of goods and services in New Zealand. GST is a compulsory tax report to IRD by all businesses monthly, two-monthly and six-monthly depending on business size and industry. We have been provided GST data for the purpose of statistical data production since 1995. In addition to GST data, IR10 data(a kind of tax form) and EMS are important data sources for business surveys. IR10 data contains business financial accounts and EMS data contains the deduction information of payments made to employees by employers such as PAYE, withholding tax and total gross earnings.

3. SURVEY AREAS OF USING TAX DATA

- Maintenance of the BF using tax information: birth and ceased units
- AES redesign incorporated tax data: IR10 data stratum and two-dimensional stratification
- STRA2D sample design package development for two-dimensional stratification
- Maintenance of sub annual sample surveys using updated BF
- QMS redesign applied tax data stratum and sample reselection in each survey period
- Imputation method development using GST data
- Producing Business Activity Indicator Series using GST data

4. FURTHER DEVELOPMENT USING TAX DATA

The BF review project conducted recently to investigate moving from FTE size measures maintained by SNZ direct surveys to IRD tax size measures from the EMS tax data. The current FTE updating system in the

BF is a direct survey, but we are looking for the indirect survey to measure FTE using EMS provided by IRD. Currently we could use only PAYE data of deduction and total persons engaged in a business. The number of persons in a business is different from the definition of FTE in the BF.

In the near future, IRD plans to open a new data warehouse containing individual records to SNZ. We will investigate more specific size indicator measures from EMS to use in the BF. In the case of simple businesses, we could use directly EMS data to update the FTE size indicator in the BF. The timeliness of the size indicator will be useful for dynamic survey population maintenance. The complex business needs to be sent direct update survey questionnaire to collect separate FTE in each Kind of Activity (KAU) unit defined by SNZ. A complex business unit can consist of more than two KAU units.

5. CHALLENGES

Tax data is not a perfect fit for SNZ survey purposes because IRD is collecting in data for tax assessment purposes. The definition of items in tax data is not exactly same as the SNZ survey items. Therefore we need to derive survey items from the tax items to feed into survey items.

The different definition of business units between SNZ and IRD causes a problem in matching GST data and business units in SNZ surveys. This is mainly due to GST return group unit defined by IRD. Several statistical units defined by SNZ can be a GST return group unit for IRD. We need to split GST values into several business units to meet the definition of SNZ survey units.

To use tax data directly in the current survey period, we have a timing problem due to tax office processing time and tax payer reporting frequency differences(either monthly, two-monthly or six-monthly). We need to produce reliable estimates for not reporting periods. We have some quality issues in tax data(for example industry code) due to limited edits of non-tax essential fields.

6. CONCLUSION

SNZ is gradually moving into indirect surveys using administrative data for small and simple businesses to reduce compliance cost. The AES and QMS are the pioneer surveys for using mostly tax data for small businesses to manage the respondent load. The trend of using tax data stratum will be spread to other sub annual surveys like Wholesale Trade Survey and Retail Trade Survey in the future.

When individual records of EMS are available, SNZ will have the great advantage of deriving size indicators for the BF with timeliness and cost savings. SNZ direct frame updating surveys like Monthly Frame Update Survey and Annual Frame Update Survey will concentrate on the complex businesses to collect information to update the BF. As a result of this dynamic population maintenance, sample reselection strategy introduced will be settled in to reflect the current population for sub annual surveys.

7. REFERENCES

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