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DEVELOPMENTS IN ECONOMIC
CENSUSES AND SURVEYS
IN NEW ZEALAND

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Developments in Economic Census and Surveys in New Zealand (With emphasis on the Services Sector)

This paper describes the New Zealand Department of Statistics strategy for collecting business, economic and financial statistics. The first part outlines the strategy. The paper then briefly describes the main collections showing how they fit within the strategy.

The Department adopted the United Nations System of National Accounts and a series of International standard classifications in the early 1970s following the adoption by government of a plan recommended by the National Development Council's Technical Committee on Statistics.

At the same time the emerging importance of services was recognised and that in response to this the statistical system needed to expand its focus from the traditional areas of agriculture, manufacturing and distribution into the newly emerging areas of personal and business services. No increase in resources were granted to meet this need so in response a rotating scheme of economic censuses was started in 1975 with the objective of covering all the economy over a 5-7 year period. Some censuses were held every 2-3 years e.g. manufacturing. The objective to cover all the economy was met with the first census of Finance and Insurance in 1983. In 1986 it was decided to modify this scheme by introducing three major new developments:

- An annual update of the departments Business Directory
- A five yearly Economy Wide Census of the non-agricultural sectors of the economy.
- An annual sample survey of the non-agricultural sectors of the economy.

Details of these new developments and progress in implementing them are described below.

The Current Programme

The programme now being followed has these core elements:

1. Business, economic and financial statistics are consistent with the standards set out by the NZ SNA and the standard classifications adopted by the Department. There has to be good reason for not following this course.
2. Well maintained directories of every business and government organisation forms the basis for all relevant statistical collections. (The business directory and the agriculture directory)
3. An five yearly census of all businesses - The Economy Wide Census.
4. An annual survey of a sample of all businesses - Annual Enterprise Survey (64 industry groups).
5. Quarterly surveys of the more important productive activity, (Manufacturing and Wholesale Trade).
6. A monthly Retail Trade Survey.
7. Monthly and quarterly surveys of the outputs of particular products are made on a user pays basis.
8. Price indices cover the purchases, sales and wages for 25 groups which cover the whole economy.

Macro Economic statistics draw on the information from the above and other series to provide:

1. Five yearly Inter-Industry Studies with interim updates.
2. Annual current price national accounts for 25 groups of producers.
3. Annual constant price measures of contribution to GDP of 9 groups of producers.
4. Annual constant price measures of expenditure on GDP.
5. Quarterly constant price measures for production and expenditure. (The latter not fully operational).

Conceptually the above series fit neatly together because they follow the relevant standards. In addition there are some collections which are not fully integrated. These include the Consumer Price Index (CPI), Merchandise Trade, Building permits and quarterly Building work put in place survey.

The Business Directory.

This holds the definitive list of all non-agricultural business and government enterprises and is the lynch pin of economic statistics.

The directory is maintained from a variety of sources. The major one being the Goods and Services Tax (VAT) registration. Others include the Annual Update Survey (ABDU) and information fed back from respondents to surveys.

When a business registers for GST the Inland Revenue Department provides the Statistics Department with the name, address and activity. This transfer of information takes place monthly. Before the new businesses are placed on the directory they are surveyed to obtain further classification data.

Each year, in February, every enterprise on the directory, some 140,000, is sent an "Annual business Update questionnaire" (ABDU). Results are available in August of the survey year.

Using the information on the questionnaire the directory records information on the structure of each business as a hierarchy of enterprise units, accounting units and activity units. It records the industry classification and the number of employees as a size indicator.

For locations there is a record of the geographic position. This allows every location to be allocated to one of 34,000 meshblocks and through this to any local authority or statistical area.

There is also housekeeping data such as the birth date, date of last update etc. The data in the directory is not confidential (being that is specified in the Statistics Act as being releasable) except the record of ownership links between enterprises.

A publication "New Zealand Business Patterns" is produced each year showing information on the numbers, industry and size of businesses by major geographic areas. More detailed information is extracted on a user pays basis.

The Economy Wide Census (EWOC)

Since the early 1970s the Department has tried various ways of collecting information on the non-agricultural part of economic activity. A rolling census over three to five years was tried with some industries, notably manufacturing, being collected more often. This meant however that we never had a complete coverage in a single year. A significant new development is the Economy Wide Census.

For 1986-87 all industries were covered in the one year. The programme calls on the information collected to be published by the middle of 1990.

The information collected includes:

- Employment
- Sales and Other Income by type
- Operating Expenditure by type
- Fixed Asset
 - Purchases
 - Sales
 - Book Value
- Goods and Services
 - Sold
 - Purchased
- Value of Exports and Imports of Goods and Services
- Floorspace used

A typical questionnaire for business services asked for 48 data items. The information collected includes all that necessary to complete a SNA production account and statement of real capital formation. It also collects information which can be presented in a form that would be familiar to business accountants.

Information at the local level is restricted to sales, salaries and wages, total gross income, additions to fixed assets and, floor space.

Where an enterprise has more than one accounting unit the key information is brought together on one sheet to summarise the whole activity of the business.

Within the EWOC collection supplementary questionnaires are included to obtain commodity and service analysis of purchases and sales. These are used for the Inter Industry and Price Index regimens.

From the EWOC collection is set up a clean data base of unit information. This is interrogated to produce tables for publication as a community value product, for use by other sections such as the Inter Industry, National Accounts and Price Index Development branches. The data base is also used to produce information on a user pays basis.

The first of seven EWOC publications the 'Census of Finance, Insurance and Business Services' has just been finalised. An example of the information published is attached.

Coverage

Specifically the coverage of the 1987 EWOC covered all the industries in the New Zealand Standard Industrial Classification (NZSIC), Revised 1987, with the exception of the following:

Major Group	111	- Agriculture
Sub-Group	41010	- Electricity Generation and Distribution
Sub-Group	41030	- Steam and Hot Water Supply
Sub-Group	42000	- Water Works and Supply
Sub-Group	81492	- Self-employed Building Society Commission Agents
Sub-Group	82302	- Self-employed Insurance Commission Agents
Sub-Group	83113	- Real Estate Commission Agents
Group	8312	- Ownership of Real Estate
Major Group	910	- Public Administration and Defence
Sub-Group	93105	- Ancillary Services to Schools
Sub-Group	93403	- Other Welfare Institutions
Major Group	939	- Other Social and Related Community Services, including Churches
Sub-Group	94141	- Live Entertainers
Group	9415	- Authors, Music Composers and Other Independent Artists n.e.c.
Sub-Group	94209	- Cultural Services, n.e.c.
Major Group	944	- Sporting Clubs and Sports People
Major Group	953	- Domestic Services
Division	96	- International and Extra-Territorial Bodies

The Annual Enterprise Survey (AES)

The main objectives of the Annual Enterprise Survey are to:

- (1) provide the main accounting aggregates needed to construct National Accounts in the four years between the Economy Wide Census,
- (2) provide improved annual benchmarks for the reconciliation of quarterly and annual G.D.P. estimates,
- (3) provide the basis of annual updates of Input - Output tables,
- (4) support an increase in the number of production groups which form the basis of National Accounts,
- (5) provide economic intelligence for the analysis of movements in different industries within the national economy,
- (6) provide the framework to produce information required to meet the extension of National Accounts beyond the Production Account into Income and Outlay Account and Capital Finance Accounts.

Survey Description

The AES questionnaires are designed to closely match a set of business accounts. They contain a system of checks, and balances back to a set of business accounting records.

The Survey population is drawn from the Department's Business Directory and through the use of stratified sampling methods a sample of private sector accounting units, are selected to receive an AES questionnaire. The sample only relates to the private sector. The Central and Local Government Sectors are covered in total.

The Enterprise Survey operates as a separate survey in the years between when the Economy Wide Census is being run. During the Economy Wide Census years the Enterprise Survey questionnaire will be replaced by a EWOC questionnaire. It is planned that in future Economy Wide Censuses that these questionnaires will be placed on a "fast track" processing system, thereby producing timely AES results and maintaining the data series.

Data Variables Covered

Value of stocks at start and end of year split between raw materials and finished goods.

- Income from
 - Sales of goods and services
 - Direct government cash grants and subsidies
 - Interest
 - Dividends royalties, patent fees and insurance claims.

- Expenditure on
 - Salaries and wages
 - Depreciation
 - Interest
 - Bad debts, donations, royalties and patent fees paid
 - Indirect taxes
 - Purchases
 - All other operating expenses

Extraordinary gains/losses

Fixed asset purchases and sales by type of asset and end of year book value of all fixed assets.

Coverage

The Survey operates at the 64 Industry level from Agricultural Contracting to Recreational Services. However, it does not operate where adequate annual data is available from other sources. As a consequence the following areas are excluded from the scope of the survey.

Agriculture
Water Reticulation
Central Government Administration

Availability of Results

The first Enterprise Survey was carried out for 1985-86 year. The objective is for final results to be published in March following the survey year. This has not been met to date. First Results were published in July 1987 for the 1985-86 Survey. Delays caused by the Economy Wide Census have meant that all results for the 1986-87 survey were not available until September 1989.

Consideration will be given to the advisability of producing early estimates each September for use in National Accounts early estimates. Other users will also find early estimates of considerable use.

Monthly and Quarterly Business Collections

Currently the Manufacturing, Wholesale and Retail Trade, Accommodation and some personal services are surveyed monthly or quarterly. The current surveys are a sample based on the earlier censuses and updated by sampling births to the business directory. It is intended that the sample selection method should be changed to one drawn from the Business Directory.

The aim of these surveys is to get fast response on key indicators of the level of activity in the more important sectors of the economy. The questions provide very good surrogates for the transactions identified in the national accounts production accounts.

Approximately 1,500 manufacturers are sampled quarterly and information is available for 9 industry groups. Data is collected on 21 items of sales and expenditure.

For Wholesale trade the quarterly survey collects information from about 1,300 businesses. Data is concerned with sales (turnover) and stock held. Both key leading indicators of economic activity.

A monthly sample survey of Retail Trade and Personal services provides turnover estimates every month and stocks held every quarter.

The Information collected in these surveys feeds into the quarterly national accounts. It provides information on these industry sectors and also about the level of household consumption and some aspects of capital formation.

Production Collections

Being mainly in terms of the volume of output of particular products these collections are used in the estimation of quarterly real GDP. However most of the collections are justified only because they are money earners.

They cover such products as beer, ready mix concrete, carpets, Beer production, wine sales, poultry production and outer clothing and footwear manufacture.

Price Indexes

Conceptually integrated with other economic statistics are a series of indexes covering inputs, outputs and prevailing wages. The industry groups identified are the same as those used for the production accounts of the national accounts.

The Producer Price Indexes draw information to establish their regimen from the annual censuses of business and in future will rely on the EWOC data, including the supplementary questions on commodities purchased and sold.

The prices are collected mainly by a quarterly postal collection although some information comes from the merchandise trade statistics and other sources. In principle there is now a data base of price relatives for all commodities and services for which prices are collected. This enables the Price Index branch to compile the routine published index series and also construct special indexes for paying users.

The Prevailing Wage Rate Index is also produced for the same 24 industry groups. (There are no index series for Domestic Services of Households). This collection relies on surveys of employers. In the past it was possible to use the awards for central government employees but recently it has been found necessary to institute surveys as the pay rates are moving away from those specified in centralised agreements.

Our Future Programme

The introduction of the three major new developments over the last three years has severely taxed the departments abilities. But the objectives we set ourselves in 1985 have now largely been achieved.

In the short to medium term we now have three major priorities.

1. To complete publication of the 1987 Economy Wide Census results. All data is already available to internal users and to external users on an ad hoc basis.
2. To publish results of the Annual Enterprise Survey within twelve months of the survey date. The impact of processing the Economy Wide Census in 1987 has meant that the 1988 results have still to be published.
3. To publish early estimates from the Annual Enterprise Survey six months after the survey date.

With these developments largely behind us we can now look ahead to the next 5 years. No major alterations are planned to our strategy. During 1990 our Monthly Retail Trade Survey will be revised followed by a revision of the quarterly economic Survey of Manufacturing. The sample design of the Annual Enterprise Survey will be re-designed to improve its efficiency. There is a user need for quarterly investment data which is being investigated. Planning for the 1992 Economy Wide Census will commence in early 1990.

LEGAL SERVICES

New Zealand Standard Industrial Classification (NZSIC) = 83210

Coverage: Services of Advocates, Barristers and Solicitors in private practice. Exclude the Justice Department, Courts, Judges and the Patent Office (in 91011)

GENERAL STATISTICS

Statistical Item	Year		Percentage Change
	1980-1981	1986-1987	
	No.	No.	%
Group Enterprises	900	1,084	20.4
Enterprises within these Group Enterprises	902	1,091	21.0
Activity Units (including Ancillaries)	1,030	1,285	24.8
Full time equivalent persons engaged	9,030	11,707	29.8
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Stocks - Closing	652	893	37.0
Opening	678	828	22.2
Income - Sales of Goods and Services	206,860	589,043	184.6
Interest and Dividends received	600	2,894	380.7
All Other Income Received	381	18,430	4,212.3
Total Sales and Other Income	207,831	608,357	192.6
Adjusted for Change in Stock Values	207,907	608,423	192.6
Operating Expenditure - Salaries and Wages	61,320	172,633	181.6
Depreciation	2,288	11,893	419.8
Interest	3,661 ⁽²⁾	24,450	567.9
Indirect Taxes	1,068	2,344	138.2
Purchases	51,739	9,850	268.8
All Other Operating Expenditure	120,076	401,277	234.2
Total Operating Expenditure	401,277	568,889	558.0
Working Proprietors/Partners Salaries and Wages	30,980	7,910	-74.5
Net Profit before tax, after deducting working proprietors/partners salaries and wages	56,851	199,236	250.5
Economic Values			
Operating Surplus	90,892	234,534	158.0
Value Added	156,315	424,320	171.6
Fixed Tangible Assets			
Purchases During the Year	4,504	38,353	751.6
Sales During the Year	..	5,415	..
Book Value at End of the Year	13,550	88,889	558.0
Ratios			
Value Added per full-time Equivalent Persons Engaged	17,311	36,245	109.4
Value Added per \$1,000 of Salaries-Wages Paid	2,549	2,458	-3.6
Total Sales and Other Income per Full-time Equivalent Persons Engaged	23,027	51,965	125.7
Net Profit per Total Sales and Other Income	27.3%	32.7%	.
Total Salaries and Wages per Total Sales and Other Income	29.5%	28.4%	.
Value Added per Total Sales and Other Income	75.2%	69.7%	.

(2) Includes bad debts, donations, royalties and patent fees paid.