

Development of Service Industry Statistics in Australia

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Introduction

In previous papers presented to the Voorburg Group by Mr Sarossy (in 1989 and 1990) and Dr Steel in 1990, the revised economic statistics strategy for Service Industries being implemented in Australia has been outlined. This paper takes that picture further and details the development work which has occurred in 1991.

To summarise, the revised economic statistics strategy calls for :

- . a change in the Business Register coverage work to only utilise one source, the Australian Taxation Office (ATO);
- . a change in the statistical units model in which financing and producing units are recognised primarily based on data availability;
- . special attention to be paid to the very large enterprise groups operating in Australia to ensure that the statistical picture of them being obtained in our collections is accurate. This involves a regular "profiling" exercise to obtain up to date statistics of these groups;
- . the implementation of an upgraded standard industrial classification designed to more clearly align with ISIC and to reflect changes in Australian industry structure;
- . the implementation of an upgraded commodity classification covering both goods and services;
- . a set of rotating industry collections in which the structure and performance of particular industries is measured. These collections will provide the basic benchmark information to enable current estimates of gross product in services to be measured;
- . an annual "broad brush" picture of the whole economy to be measured via an economic activity survey;
- . revised sub-annual surveys to measure various activities or performance measures reflecting the units and coverage changes referred to above.

This paper now looks at each of these issues in so far as they affect the collection of Service Industry Statistics.

Business Register Coverage

The Business Register was amended two years ago to exclude those single enterprise group units which did not employ any people. This has meant that the ATO records with respect to group employers¹ and tax stamp book applicants can be used as the sole source for the Business Register. Collections such as the monthly Retail Trade Survey were therefore reduced in scope to

¹ In Australia, income tax collected by businesses on behalf of the Government are paid via either the group employer or the tax stamp book system. (The latter generally for small businesses)

reflect only this group of businesses. The overall impact of this reduction was minimal for most industries, with a total impact in loss of coverage of about 2 per cent.

During the past year or so, an intensive effort has gone into the alignment of the ABS Business Register with the information held by the ATO. Two complete matches of the Registers were undertaken and the resulting discrepancies analysed closely. As a result of this work, ABS now has a Business Register which reflects all the employing businesses operating in Australia. The initial matches showed that the old system of obtaining new businesses from ATO had been deficient and that there had been an omission of some businesses from our statistical frameworks over the years. (These omissions appear to have arisen because of clerical errors, in either ATO or ABS, with the old paper based system.)

As far as the monthly Retail Trade Survey was concerned, this leakage was estimated to be in the order of 4 per cent. Results from the survey have now been adjusted to overcome the leakage and the series revised back to 1982. Work is still progressing on the estimation of the impact of the leakage on other statistical series compiled by the ABS.

Statistical Units Model

The change to the statistical units model has not yet impacted significantly on the statistical collections covering the Services sector.

For the monthly Retail Trade Survey, the large retail chains have always been treated in a special way, ensuring the collection of detailed industry and State data from each of them. These special arrangements have continued. Any impact of the revised units model will be implemented in the re-design of the Retail Trade Survey which will follow the 1991-92 Retail Census.

For the other regular quarterly business surveys, the major changes to statistical units brought about by the revised units model tended to reflect the "industry-split" procedures that were already adopted for very large enterprises. Hence, the statistical impact of the changes was also minimal.

There have been no major collections of industry economic performance data in the Services sector since the implementation of the new units model. The first of these collections will be the 1991-92 collections which are discussed in a subsequent section of this paper. As far as statistical units are concerned, however, it appears that for cases where there is a requirement for small area data, the location (rather than the establishment) will need to be used. It is also possible that industry homogeneity will be slightly compromised by the use of the management unit² as the statistical unit for the collection of economic performance data.

2. The management unit is defined as being the unit for which an enterprise group keeps accounting records sufficient to compile profit and loss statements on a quarterly basis. For large enterprise groups the unit generally aligns with industry divisions of the group. For small enterprise groups it is generally equivalent to the enterprise, or the legal entity.

Profiling of Large Businesses

The profiling of large enterprise groups in Australia was undertaken to more closely align the statistical picture of them with the availability of economic performance data. There were two main reasons for this. The first was to improve the quality of data reported by businesses. The second was to ease the reporting load on businesses by aligning our perception of their structure with the way in which they compile their accounts.

The effort being put into profiling work in Australia in the last year has decreased for two main reasons. The first has been due to the very large workload imposed by the coverage work described above. The second is that the first round of profiling visits had been completed.

Attention is now again being paid to the re-profiling of large businesses involving 600 enterprise groups covering approximately 30 per cent of economic activity with the intention of each large enterprise group being re-profiled every year or when there is knowledge of significant restructuring occurring. The impact of the recession in Australia has had a marked effect on the corporate structure of our large business sector and has increased the need for re-profiling. In addition, the 1991-92 Retail, Wholesale and Selected Services Industry collections require that the structure for businesses in those fields be accurately reflected on our Business Register by the middle of 1992.

Industry Classification

The ABS has been working for a number of years on a revised industrial classification. This work is now virtually complete; the aim is to have the revised classification ready for implementation by the end of this year. Consequently, it is hoped to incorporate the classification in the round of 1991-92 Retail, Wholesale and Selected Service Industry collections.

A feature of the new industrial classification is that it will incorporate classes which are specially relevant to the New Zealand economy and will be used by both countries. The new classification will in fact be known as the ANZSIC.

Work is now about to commence on assessing how ANZSIC can be introduced into all the ABS statistical collections. The aim is to introduce the ANZSIC as much as possible at the one point in time, to ensure that comparable collections are treated consistently to allow across survey comparisons to be made, and to ensure that individual statistical series are not compromised.

The achievement of each of these objectives and the allocation and recording of the ANZSIC codes onto our Business Register imposes a very severe workload on ABS and the time period over which the revised classification will actually be implemented has not yet been determined.

Commodity Classification

The Australian Standard Commodity Classification (ASCC) is currently being extended to cover all goods and services.

Consideration is presently being given to publishing an ASCC covering all goods and services in the latter half of 1993. At present there is a lead time of 2 to 2.5 years to complete all necessary tasks before the next full Manufacturing Census, which is to be conducted commencing mid 1993 in respect of the 1992-93 financial year.

The revised ASCC will be based on the CPC and will result in the standardisation and integration of all industry based commodity collections undertaken by the ABS.

Current ABS thinking is that the CPC would provide the best framework option as it fits well with the general level of disaggregation possible for Australian production statistics and its industry of origin structure relates well to ABS industry based collection methodologies. Adoption the CPC would not prevent further disaggregation along SITC or HS lines or to satisfy particular user requirements.

Because of the different levels of aggregation apparent in the different product types (eg stocks as opposed to sales) the ASCC will seemingly need to contain annexes for each type. An assessment will be made as to how such items are to be represented in the ASCC.

In applying the CPC to collections covering **non-transportable goods and services**, it is anticipated that the broadest levels of the classification be used consistently and that finer level items be used as a guide. This would need to be looked at on a case by case basis to establish the appropriate level for any particular collection. Reasons for divergence from the finer levels of the classification are to be documented for reference and for comment back to the UNSO.

1991-92 Rotating Industry Collections

1991-92 is the reference year of the first of the service industry collections being undertaken under the umbrella of the revised economic statistics strategy. The rotating industry collections will need to be fully compatible with the first production version of the economic activity survey discussed later in this paper.

Work in the past year has therefore primarily been in the area of determination of user needs and the setting in place of a broad collection strategy to meet those needs within the budget provided.

For the Retail Industry collection, users have requested that the outputs should be :

- . small area data - for only a few data items
- . commodity data - preferably for small areas
- . industry performance data - at industry class level

For small area data to be useful, it is necessary to have full coverage of the businesses operating in that area. This implies that ABS needs to supplement its Business Register for those units who are neither group employers nor are part of the tax stamp book system. The preferred strategy is to access ATO income tax records to determine a "group" of businesses which can be added to the collection without requiring a complete match to the ABS register. Investigations into this methodology are continuing.

Under the revised economic statistics strategy, establishments may be multi-location. Hence, to derive small area data, it is necessary to collect data in respect of locations, although the collection unit will be the establishment or the management unit.

The collection of commodity data from retailers has proven to be most difficult in Australia. The data are not readily available on a consistent basis. It generally takes a significant effort by businesses to provide the data. For this reason, it is proposed to collect data only at the management unit level and from a sample of retailers. Estimates for smaller areas may be derived using synthetic estimation techniques.

Industry performance data are to be collected in respect of management units and this part of the collection will be amalgamated with the annual economic activity survey. The question of industry homogeneity within management units of large retailers will be re-assessed as part of the re-profiling of those businesses referred to above.

For the Wholesale Industry collection, user demand is much lower. There is some demand from non-ABS sources for industry performance data, but none for small area or commodity data. However, internal user demand is quite strong for a range of national accounting purposes. These include the development of benchmark data for input-output tables, estimates of industry gross product and in deriving weights for the compilation of constant price estimates of consumption expenditure and like variables.

It is therefore proposed to conduct only a management unit sample survey sufficient to provide estimates at an industry group level. This collection will be amalgamated with the economic activity survey for 1991-92. Separate studies of particular areas of interest for national accounting purposes will be built into the overall statistical system. It is not intended to extend the coverage of the industry beyond that shown on our Business Register.

For the Selected Service Industry surveys, it has been decided to bring forward part of the work scheduled for later years and start the collections one year earlier than outlined in last year's paper.

An assessment of user priorities for the industries to be included in the collection has been completed. This has led to a recommendation that the 1991-92 survey should cover a range of tourism related industries. Hence, cafes and restaurants, hotels, clubs and accommodation industries will be included. As well, we will look at developing a limited scope collection covering specific tourist attractions. The scope of the tourist attraction collection will be limited because of the difficulties in obtaining a workable list of all tourist attractions.

For these industries (other than tourist attractions) it is expected that the collection will be in respect of management units and that the data items collected will essentially be economic performance measures plus a range of "commodity" items suitable for deriving a better measure of the output of these industries. Part of the investigation of the commodities to be included will be a study into this area of the CPC and how it aligns with what the industries see as relevant output measures. Detailed user consultations on which data items are required and a detailed study of data availability issues from businesses in these industries have recently commenced. As experience grows in this field comments will be forwarded to the UNSO for consideration.

There has been no requirement expressed for small area data from the industries to be covered in 1991-92. Hence there is no need to move to a location basis for collecting statistics nor is there any need to upgrade the coverage of the ABS business register.

The industries to be covered in respect of 1991-92 are expected to include a range of professional and business service industries similar to those in ABS' 1987-88 round of collections. One possible addition to the list is, however, the medical profession. There has been a deal of public and political debate in Australia over many years about the medical system and the extent of resources being devoted to it. Australia would like to hear of other countries' experiences in undertaking statistical collections in this field.

Development work for these will only begin in earnest in 1992. ABS hopes to learn from other participants' efforts in this area, particularly in respect of the computer industry. It is also hoped to develop an information, computer and communication survey, perhaps in line with OECD work in this field, to complement the computer services industry survey.

Economic Activity Survey (EAS)

As outlined in last year's paper, the EAS is being developed over three years. The first collection in respect of 1988-89 was an experimental one; it was followed by a dress rehearsal in respect of 1989-90 and the first "production" survey is now in progress (in respect of 1990-91).

EAS is designed to produce basic economic performance measures which can be derived from profit and loss and balance sheet statements. It is designed to cover all industry sectors and will provide data at a reasonably aggregated level of industry classification. For practical reasons the general government sector has yet to be incorporated into the survey, but it will be in the future years.

With the changes to the Business Register coverage and the implementation of the new units rules, the EAS should enable the publication of industry performance measures across the whole economy in a consistent manner.

Results from the 1989-90 EAS are currently being evaluated, prior to any decision being made about their publication. The chart (Attachment 1) shows the latest estimates of industry gross product from 1989-90 EAS and compares these to the estimates compiled as part of our national accounting system which are benchmarked to the ATO data.

At this stage, it is thought that the major differences between the two sets of results are :

- . different allocation to industry between ABS and ATO;
- . EAS results have not been adjusted for an "imputed bank service charge" for the finance industry;
- . ANA results for Division K (Community Services) includes a large component of general government.

Interestingly, after making allowances for the bank service charge and for general government enterprises, the results, economy wide, are very comparable.

Apart from measuring the output of the economy, the EAS is generating a range of performance ratios which should be of interest to industry and business analysts, utilising both profit and loss and balance sheet information. At this stage, it is envisaged that the following ratios will be published :

- profit margin
- stock turnover
- return on funds
- return on assets
- return to shareholders
- liquidity ratio
- current ratio
- short term debt to equity
- long term debt to equity
- profit to employment
- industry gross product to employment
- labour costs to employment
- industry gross product to labour costs
- acquisitions to disposals (of capital equipment)
- net capital expenditure to assets
- net capital expenditure to profits

Preliminary results from the 1989-90 survey are shown in Attachment 2 and these are currently being analysed. It is hoped to publish these results in the near future, recognising that the data are only experimental at this stage. It is interesting to note, however, the large differences between the various groupings within the Services sector. ABS would appreciate any input from participants in respect of the collection and publication of these types of statistics in their own countries.

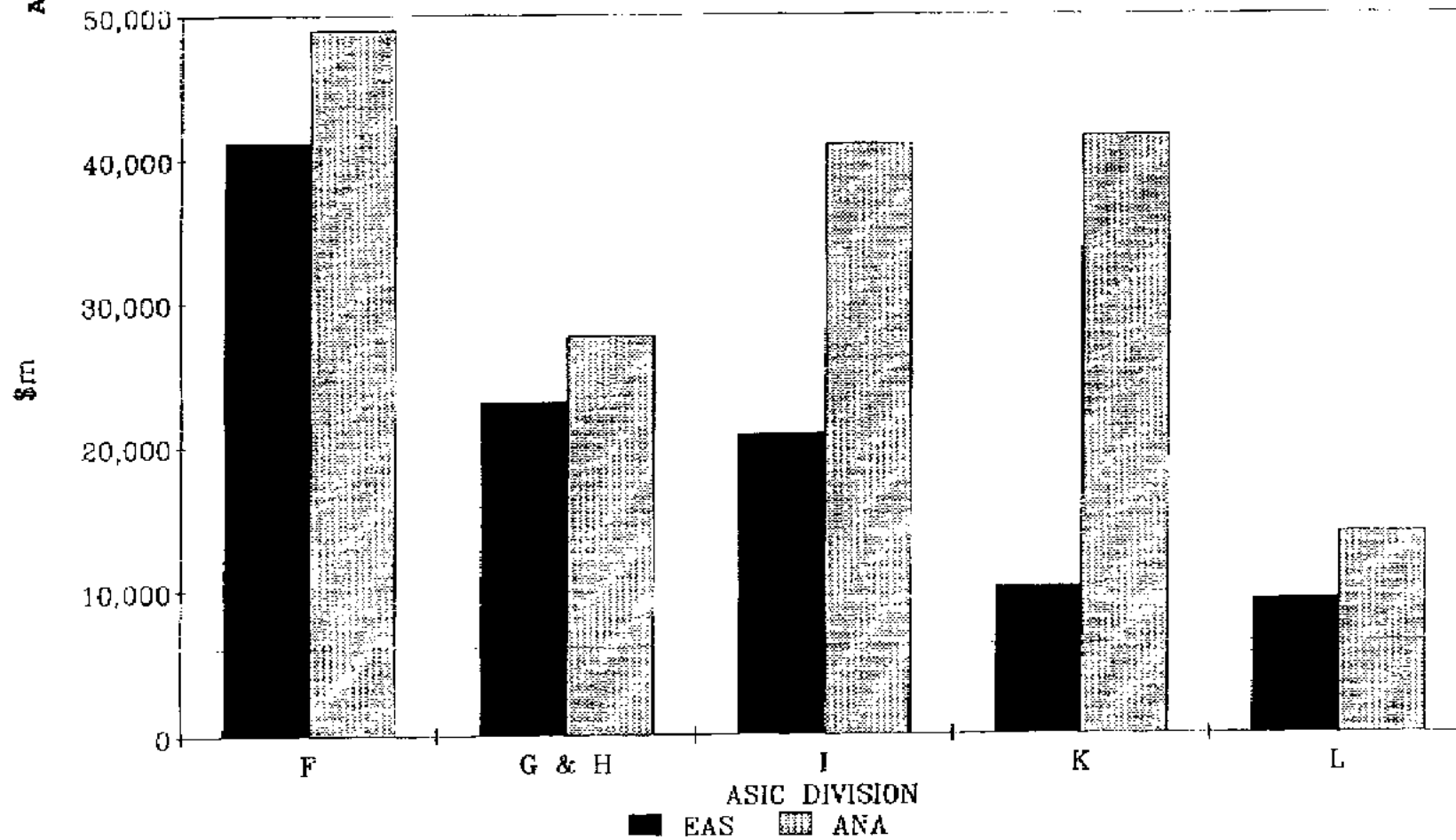
Sub-annual Surveys

The sub-annual surveys are being adjusted for the change occurring as a result of the revised economic statistics strategy. In general, it can be said that the effects of the changed Business Register strategy, the changes to the units model and the profiling exercise have been incorporated into the results. The major change yet to be implemented is in respect of the revised industry classification. As mentioned earlier in this paper, work is just commencing on this issue.

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GROSS PRODUCT BY INDUSTRY, 1989/90



Attachment 2

**Provisional Results From the 1989-90 Economic Activity Survey,
Selected Performance Ratios To the Services Sector**

Ratio	Service Industry				
	Wholesale and Retail Trade	Transport and Communication	Finance and Business Services	Community Services	Recreational and Personal Services
Profit Margin (%)	2	5	32	12	6
Return to Funds (%)	5	3	10	4	4
Return to Assets (%)	4	4	2	7	4
Return to Shareholders (%)	12	12	4	12	10
Current Ratio	1.2	0.8	0.9	2.2	1.1
Debt to Equity (%)	145	76	102	29	83
Proportion to Employment (\$'000)	3.2	5.2	21.4	3.6	2.7
Labour Costs to Employment (\$'000)	19.1	32.2	26.4	20.7	12.1
Net Capital Expenditure to Assets (%)	6	11	..	6	8