

**OWN ACCOUNT PRODUCTION, TRANSACTORS  
AND TRANSACTIONS**

**(OR OWN ACCOUNT AND SECONDARY SERVICES:  
AUSTRALIAN EXPERIENCE)**

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1. "Secondary services" were considered in a US Bureau of the Census paper tabled at the 1988 meeting of the Voorburg Group. The present paper attempts to clarify and expand on the issues raised in the US Bureau of the Census paper.

2. The discussion at the 1988 meeting on own account and secondary services indicated that there was some confusion about the role of activities versus industries. It has therefore been thought useful to commence this paper with an outline of the basic principles associated with industry and activity statistics. The paper then goes on to examine the implications of extending these principles to more complex economic entities in the process drawing on Australian experience of delineating complex statistical units. The paper then describes some Australian experience with a range of service statistics collections.

3. The basic principles underlying industry and activity statistics can be stated as follows:

Industry Statistics: Statistics such as gross output, are derived from a summation of data on goods and/or services produced and the costs incurred by establishments classified to a particular SIC.

Activity (or Commodity) Statistics: Data derived from the production or consumption of certain goods and services regardless of the SIC to which the establishments producing or consuming these goods and/or services have been classified. The production and consumption of these goods and services can relate to both marketed and non-marketed goods and services. Activity statistics can also include non-financial or physical measures of activity, such as goods moved, distance travelled, quantities produced or consumed, number of specified services performed, etc.

4. There are three types of services:

Primary Services: These are the marketed services (or commodities) produced by establishments whose main activity is the production of those services. Establishments are classified to a SIC reflecting this primary activity.

Secondary Services: These are the marketed services (or commodities) produced by establishments where these services represent activity that is secondary to the main activity of the establishment producing the goods and services.

Own account (or captive) services: These are non-marketed services (or commodities) produced by an establishment in support of or contributing to its primary function of providing marketed goods and/or services.

5. The application of these definitions and concepts is illustrated in the simplified model shown in Attachment 1.

Industry Statistics: In this table, the aggregate industry statistics for SIC 6023 would be employment of 105 (Row 5, Col 1), revenue 1100 (Row 5, Col 2) and expenses 550 (Row 5, Col 3). The statistics represent the sum of the data for establishments whose main activity is road freight transport.

Activity Statistics: In this table, statistics relating to road freight transport activity are, revenue 1210 (R1, C8) and expenses 585 (R1, C9 plus R4, C9). Note that a complete matching of revenue and costs is not achievable, as revenue relates only to marketed road freight transport services.

Primary Services: In this table statistics of "primary" road freight transport services are employment 100 (R1, C1), revenue 1000 (R1, C2) and expenses 500 (R1, C3).

Secondary Services: In this table statistics of "secondary" road freight transport services are revenue 210 (R1, C5) and expenses 60 (R1, C6).

Own Account Services: In this table, the statistic of "own account" road freight transport services is expenses 25 (R4, C6). Revenue is not applicable.

6. In applying these definitions, it can be seen that we are attempting to maintain a clear distinction between industry statistics and activity statistics. The rationale for this is due to applying commonly accepted statistical standards, in particular SNA and ISIC principles for defining establishments, where like establishments (same SIC) are summed to form industries.

7. Statistical users have varying needs for industry versus activity statistics depending upon their own circumstances, and subject to their often very poor understanding of the fundamental difference between the two types of statistics. The viability of compiling activity statistics varies considerably according to the particular

types of activity data involved (eg revenues, costs, or other non-financial activity measures) and whether the data is of a "secondary" or "own account" nature.

8. The distinction between industry and activities and how these principles are applied may be confusing in the case of relatively simple economic units but when they are applied to complex economic entities the application of the principles is somewhat more difficult.

9. Increasingly economic activity in Australia is being concentrated in a relatively small number of large and diverse entities. Some 1500 entities account for some 50% of Australian economic activity. The delineation of units within these conglomerates poses many challenges as does the determination of what constitutes primary, secondary and own account activity.

10. The increasing complexity of the economy, and the increasing concentration of ownership of economic production has led to a basic re-examination of both the units structure utilised in the Australian statistical system and a redefinition and redelineation of how primary, secondary and own account production should be defined.

11. The increasing demand for a range of data on physical, financial and personal services led to the conclusion that a concept of an establishment based on a simple physical location was inappropriate for industries such as construction, transport and financial services. Instead, a base of operations which could involve one or many locations was found to be much more appropriate. The concept implied a relatively autonomous unit with its own set of accounts from which could be collected a range of statistical data.

12. The former concept of a location based establishment has, with the recent revolutions in communication and transportation, also become increasingly irrelevant to the traditional producing industries where a number of manufacturing plants, agricultural businesses and retail outlets are increasingly being managed from a remote location.

13. The previous definition of an establishment based on a location did recognise that in some situations separate locations involved in transportation, storage, wholesaling and a number of other activities were not really establishments in their own right but merely ancillary units undertaking own account work on behalf of the enterprises. These ancillary units were coded to the industry or industries of the establishments they served. In some cases where the units performed significant secondary activity separate establishments were delineated.

18. In Australia, the most complex example has arisen in respect of road freight transport services. Establishments classified to the road freight transport industry (equivalent to ISIC 6023 Road Freight Transport) account for only some 60% of road freight tonnage hauled, about 45% of persons mainly employed as road freight vehicle drivers and about 22% of road freight vehicles (1983-84 ABS Transport Industry Survey). The dominant user requirement is for activity statistics, but it has been considered essential to also produce industry statistics consistent with statistics for other economic sectors, and applying SNA/ISIC principles. The 1983-84 Transport Industry Survey was consequently designed and run in two compatible parts:

- (a) **Industry Statistics:** An industry survey was undertaken of the Road Freight Transport Industry which, in the main, involved standard output and intermediate input statistics (financial data) employment statistics, capital expenditure, vehicle details, freight carried, fuels used and detailed dissections of these items. These statistics were compiled for establishment (producing) units, and a range of financial statistics were also compiled for enterprise (financing) units.
- (b) **Activity Statistics:** To provide measures of road freight transport activity undertaken outside the road freight transport industry, an extensive survey was undertaken of both own account and secondary road freight transport services provided by units not classified to the road freight transport industry (eg units classified to retailing, manufacturing, mining, agriculture, etc). Substantially the same data was collected as for the industry statistics component, except for revenue data, as this would have involved the extra complexity of differentiating between own account (where revenue data is not available) and secondary services, to little advantage in this case.

19. The result of this dual approach was that user requirements for both industry and activity statistics were provided for, and the two sets of statistics were completely compatible. There were considerable advantages in compiling the statistics for the one reference period and in being able to control the application of data definitions and statistical procedures. The statistics were also able to be classified by industry sector of the enterprises engaged in secondary and/or own account road freight transport, even though they remain "activity statistics".

20. A major difficulty in compiling such activity statistics is that methods of identification of units engaged in the activity of interest are very costly and often not readily available. For the Transport Industry Survey, the procedure involved was to access the road freight vehicle licensing system to identify vehicles and their owners and then linking this data with the ABS business register. This enabled a clear distinction to be drawn between establishments classified to the Road Freight Transport Industry (from which the industry statistics were derived) and vehicles owned and operated by units classified to other industries (which provided the supplementary activity statistics).

21. The principles applied in the activity statistics component of the 1983-84 ABS Transport Industry Survey were derived in part from the recommendations of the UNECE report "European Programme of Basic (Census-Type) Statistics of Inland Transport, 1969". International standards and guidelines of this type, by industry sector, would seem to be

a useful way of highlighting the issues involved in services statistics, and also in achieving standardisation. This appears to be one of the few documents addressing problems of secondary and own account services.

22. When considering own account and secondary production in the compilation of industry and activity statistics there is little difference, in principle, between goods and services. There are a number of examples in the Australian situation where the significance of this production has been sufficient to develop systems to measure own account and/or secondary production of goods and services. Some examples are:

- (i) Secondary production of goods and services incorporated within industry statistics. In regular surveys, from which are derived industry statistics, considerable detail is obtained of the secondary production of (goods and) services. Establishments are typically asked to provide a dissection of revenue into the major components, so this approach does provide some basis for improving the availability of services statistics (eg as suggested by Parker, US Bureau of Economic Analysis, in a paper titled "Industrial Classification Systems for National Economic Accounting - Are Services a Problem", tabled at the 1988 Voorburg Group meeting). This approach suffers from difficulties of application of consistent definitions of the particular services, and also the generally low priority given to this data when the focus is on industry statistics themselves (production of "primary goods and services"). For example, for some years ABS collected secondary production of manufactured goods by non-manufacturing establishments, and retail sales by non-retail trade establishments.
- (ii) Own account construction activity. Regular industry surveys of the construction sector also include a parallel series of statistics compiled for own account construction activity undertaken by public sector enterprises.
- (iii) Travel Agency Services. In respect of travel agency services, a significant amount of secondary activity is undertaken outside the travel agency services industry by financial institutions, such as banks. In this case, ABS has incorporated the banks' travel agency "divisions" in the industry statistics via the application of extensions to the generalised enterprise-type unit formation rules. Airline operators also act as travel agents for other businesses (airlines, coach operators, hotels etc) and so have secondary activity. This was handled by collecting activity data from such entities as a supplement to the industry statistics.

- (iv) Other Service Industries. In recent years the range of industry statistics has been expanded beyond the more traditional goods producing, to the business and personal services producing industries. So far, the ABS has concentrated on industry statistics, and the primary and secondary activities within those industries. We have not yet attempted to obtain activity statistics outside these industries. We have considered undertaking an exercise similar to that of Statistics Canada (Statistics Canada, Computer Service Industry 1986 Cat No 63-222) relating to secondary production of computer services and may do so in future surveys, but recognise the problem of obtaining meaningful data in situations where the predominant activity is associated with own account production. We also have some known user interest in secondary production of services such as engineering consulting, management consulting and surveying services.

23. The likely future scenario is that with the extension of the range of service industry statistics now becoming available, statistical users will begin considering their requirements for secondary and own account services statistics to complement the industry statistics.

24. The particular definitions of the statistical units which are applied to the collection of industry and activity statistics do have an impact on the issue of statistics of secondary and own account production of services. If establishment units are defined narrowly in terms of kinds-of-activity, then the production of secondary services (and goods) will be of lesser importance in an overall sense than if they are more broadly defined. The more narrowly the establishment units are defined, the less need to consider collecting statistics of secondary services. As far as own account production is concerned, the increasing sophistication of management information systems and the setting up of cost centres for these activities is likely to make the task of collecting data on these services easier in the future.

#### SUMMARY

25. Some issues which we see as important in the Australian context are:

there is a strong need to clearly differentiate between industry and activity statistics;

it is necessary to ensure that statistical users are informed and educated about the basis of compilation of the various categories of statistics so they can make informed judgements about their needs and communicate these to the statistician;



there is always likely to be a need to consider the distinction between secondary and own account production of services and the need for statistics on either or both will vary according to the nature of the services and industries involved, their significance, etc;

it is likely that as the range of service industry statistics is extended, user requirements for secondary and/or own account services statistics will increase, so statistical organisations need to be as well prepared to meet such needs as possible. Evaluating the relevance of the existing infrastructure to emerging needs, by having international guidelines and precedents in place would also be helpful.

ATTACHMENT 3

## ROAD FREIGHT TRANSPORT INDUSTRY AND ACTIVITY

| ACTIVITY  | INDUSTRY<br>(SIC) | ISIC 6023<br>FREIGHT TRANSPORT<br>BY ROAD |      |      | ALL OTHER<br>INDUSTRIES |               |           | TOTAL |       |      |
|---|-------------------|---|------|------|-------------------------|---------------|-----------|-------|-------|------|
|   |                   | 1   | 2    | 3    | 4                       | 5             | 6         | 7     | 8     | 9    |
|   | (COL<br>ROW)      | Empl                                      | Rev  | Exps | Empl                    | Rev           | Exps      | Empl  | Rev   | Exps |
| <b>MARKETED</b>                                     |                   |   |      |      |                         |               |           |       |       |      |
| ROAD FREIGHT<br>TRANSPORT SERVICES                  | 1                 | (d)<br>100 1000 500                       |      |      | 15                      | (e)<br>210 60 |           | 115   | 1210  | 56   |
| ALL OTHER GOODS/<br>SERVICES                        | 2                 | 5   | 100  | 50   | 1000                    | 10000         | 5000      | 1005  | 10100 | 505  |
| TOTAL   | 3                 | 105                                       | 1100 | 550  | 1015                    | 10210         | 5060      | 1120  | 11310 | 561  |
| <b>NON-MARKETED</b>                                 |                   |   |      |      |                         |               |           |       |       |      |
| ROAD FREIGHT<br>TRANSPORT SERVICES<br>(Own account) | 4                 | -   | -    | -    | 10                      | -             | (f)<br>25 | 10    | -     | -    |
| TOTAL   | 5                 | (a)<br>105 1100 550                       |      |      | (b)<br>1025 10210 5085  |               |           | 1130  | 11310 | 561  |

(a) "Industry" statistics for freight transport by road.

(b) "Industrial" statistics for all other industries.

(c) Freight transport by road "activity" statistics.

(d) "Primary" road freight transport services.

(e) "Secondary" road freight transport services.

(f) "Own account" road freight transport services.