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AUSTRALIA'S EARLY EXPERIENCE IN DEVELOPING PRODUCER
PRICE INDEXES (PPIs) FOR SERVICE INDUSTRIES

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BACKGROUND

1. In July 1994, the ABS commenced initial work on a long-term development program to progressively extend the scope of the PPIs into the service sectors of the economy.
2. The main objectives were to provide deflators for the quarterly National and State (ie provincial) accounts and future annual constant price Input-Output tables, and to support the development of economy-wide price indexes.
3. After 12 months experience, we took stock of progress and identified the key lessons that will assist us in our future development work.
4. Our clear objective has been to establish viable ongoing price index series for the output of a selection of service industries. However, because of the unique nature of the new areas of the economy into which we are moving, the work to date has largely been experimental and designed to provide first hand experience of a conceptual and practical nature and to assist in the development of future strategies, methodologies, etc.
5. The industries initially studied included:
 - (a) real estate agents - ANZSIC 7720 (part);
 - (b) rail freight transport - ANZSIC 6200 (part); and
 - (c) air freight transport - ANZSIC 6402 (part).
6. The initial industries were selected in consultation with the national accounts staff. Factors considered included the relative importance of the industry (in terms of the value of output), the expected development cost and the anticipated superiority of the price index relative to the best alternative available to the national accountants.
7. The selection was tempered with some pragmatic judgement about the complexity of the industry, the expected degree of industry cooperation and a desire to maximise the experience gained by investigating a diverse range of industries.
8. A generic methodology paper was prepared outlining the broad steps to be followed in developing a new index, including a structure for industry reports. The paper placed emphasis on consultation with both internal and external stakeholders.

STATE OF PLAY

Real estate agents

9. The development work for this industry has been quite successful to date with no major impediments encountered.

10. In Australia real estate agents have traditionally been subject to various State government controls. As a general rule real estate agents have to be licenced and are subject to various regulatory controls. Until recent years these controls included the setting of maximum fees that could be charged for the various services provided. These maximum fees in effect became the actual fees charged and there was no competition between agents in respect of fees. Over recent years, several of the States have deregulated the residential segment of the industry, some are about to do so, and some at this stage intend to remain regulated and adhere to a maximum fee scale which is a function of the sale price of the property. As a result there are marked variations from State to State in the operation of the industry and in the level and movement in fees. A second feature of the Australian industry is that the residential property segment is composed of a very large number of small operators (mainly sole proprietors and partnerships) and a few large franchise operations. The commercial property market, on the other hand, tends to be dominated by a few large firms.

11. Although there appears to be interest by Governments (and other users) in assessing the impact of deregulation, fees in deregulated States do not, to date, appear to be regarded by real estate agents as commercially sensitive information and we have had little trouble in obtaining details of actual fees charged. This lack of sensitivity probably reflects the fact that agents tend to compete more on service than price and that, ultimately, fees can be readily ascertained by consumers (in at least one State agents are required to publish their fees).

12. There will be four components to the real estate agents price index: fees for residential sales, residential property management fees, fees for commercial property sales and commercial property management fees. These represent the segments accounting for the majority of real estate agents' income.

13. For residential property sales, a quarterly mail survey is being conducted for a small sample of individual agents selected from our Business Register, seeking from each agent the selling price, and fee charged, for a selection of six transactions for each month of the quarter. The survey has been conducted for the March and June quarters 1995.

14. The selected agents have generally been very cooperative. Since the conduct of the March quarter survey, arrangements have been made to substantially improve industry coverage by obtaining sales and commission data relating to individual franchisees direct from centralised records held by the large franchise head offices.

15. As part of the editing process, fees reported are being compared with those derived by applying the (former) relevant maximum fee scale to the selling price. In general, in the deregulated States, commissions have not moved substantially from those based on the scale fee.

16. From this information, movements in the percentage fees charged are calculated. A price index series for established residential houses (compiled as part of the mortgage interest measure for the Consumer Price Index) is used to calculate changes in median residential house prices. The compound of these two series provides the index of real estate agents' property sale fees.

17. A quarterly proxy series of index numbers is being compiled retrospectively back to 1989-90 by applying the relevant maximum scale fee to the capital city median house prices compiled by the Real Estate Institute of Australia.

18. Residential property management fees are commonly a direct function of the rent level (eg, a letting fee of one week's rent and a management fee of 8% of the weekly rent). The fees being charged are collected as part of the survey of agents. Movements in these fees, when compounded with movements in the GPI Private Rent series, provide the index of residential property management fees. A quarterly series of index numbers is being compiled back to 1989-90 on this basis.

19. Commercial property sales transactions are lumpy and largely unique. There are few transactions in any one period and they tend to relate to vastly different mixes of buildings, in terms of type, size and location. No practicable (in terms of our available resources) method for collecting a continuous series of the associated fees for a constant quality of building has been able to be devised to date. However research has revealed that fees charged are, in the first instance, based on a scale fee applied to the sales value of the building. A number of commercial firms specialising in the commercial property market produce measures of commercial property values. A "capital value" index produced by one of these firms will be used as a proxy measure of fees. It will be necessary to periodically survey industry representatives to determine whether there have been any changes in the standard scale, particularly when there are major changes in market conditions. The index will be compiled quarterly from 1989-90.

20. Commercial property management fees are a function of the rent value. The major factor influencing movements in fees is therefore movements in the actual rents. Ascertaining rents actually charged is not straightforward as a considerable amount of disguised discounting occurs in the form of "rent free periods", "free" fitouts, etc. These are often hard to detect and difficult to value. The solution adopted is to use a commercially compiled (by a major commercial property management and advisory firm) capital city "effective rents" series. This series tracks movements in the actual rents paid ("effective rents") after allowance for the various discounts etc. Again, it will be necessary to periodically ascertain whether there have been any changes in the fee to rent relationship.

Rail freight transport

21. The rail freight investigation has also proved successful, though extremely labour intensive to establish ongoing collections, and requiring a lot of tenacity. The rationale for selecting this industry for early study included the fact that there are only a small number of operators and that in most States a few basic commodities account for a high proportion of all freight carried. It was expected that it would be possible to clearly define samples of specific services for ongoing price measurement, ie specific commodities carried over specific journeys.

22. Historically the Australian rail system has been composed of separate State government operations and a small National operation. Private rail operations were limited to a few private railways mainly in Western Australia (carrying iron ore from mines to export ports). Over the last decade, and last few years in particular, this picture has changed significantly. The government rail operators are in the process of rationalising their businesses to counter the strong competition from road freight. State government rail authorities have been "corporatised" and inter-state rail operations have been taken over by a National rail corporation. Because of their recent "commercialised" status the government operators tend to regard their data as highly commercially sensitive, and much effort has been necessary to provide assurances about confidentiality and related matters.

23. The general approach has been to work with the operators to select a manageable sample of representative specific commodities and journeys for ongoing pricing of the associated freight rates. That is, for each operator the major commodities carried have been identified, together with their mode of transport (eg bulk, containerised, enclosed waggon), and major journeys (ie origin/destination). This has resulted in a set of specifications for pricing of the type: "freight rate per tonne for commodity 'x', transported as bulk freight, from point A to point B".

24. In the case of private rail operators a problem occurs in that the mining and shipping of the iron ore is carried out by the one organisation and as a consequence no "price" exists for the service. In these cases it has been necessary to derive a notional price based on input costs. Such input costs tend to be somewhat variable from period to period and it has been necessary to "smooth" these out in order to avoid short term fluctuations in the price series.

Air freight transport

25. Interviews have been conducted with the two major air freight companies. The approach to pricing is similar to that taken with the rail freight operators. The type of information we are requesting is highly commercially sensitive. Accordingly, as requested, they have both been sent detailed follow up letters explaining our requirements and setting out the arrangements that have been tentatively negotiated. These requests will be considered by the companies' senior management.

MAIN LESSONS TO DATE

Selection of the industry/ies for investigation.

26. While there was consultation with our national accountants on the selection of the industries for the initial study, a revised approach is proposed for the future. A two stage selection process is recommended with the first stage involving Producer Price Indexes management consulting with the key internal stakeholders by reference to a set of selection criteria to develop a short list of industries. The second stage would involve "market testing" through early consultation with industry associations, relevant government bodies, etc. to ascertain whether the industries are "suitable".

27. Criteria for the stage one consultation would include
- * the importance of the industry;
 - * the expected development cost;
 - * the value of the data to the internal users;
 - * the expected complexity of the investigation in terms of ease of measurement, degree of price dispersion, stability of markets, expected cooperation, etc.;
 - * the extent to which the experience gained would be expected to be of interest to overseas statistical agencies and contribute to the proposed process of international information sharing;
 - * the exposure of the industry to other ABS collections.

28. Stage two, market testing, would involve early consultation with external stakeholders such as industry associations and relevant State and Commonwealth government regulatory or policy bodies, etc. The basic objectives would be to apply a screening process to assist in selecting from the short list. An assessment would be made as to whether we have picked likely "winners". At this early stage of the ABS's work on producer price indexes for services, we consider it important to build up positive experience and achieve tangible results. Also, the likely external demand for statistics from both a public interest and commercial perspective would be evaluated.

The markets.

29. Processes of micro-economic reform and deregulation have impacted on many service industries, leading to greater price competition and a movement away from relatively stable list prices. In this environment, the prices statistician's task is more difficult; actual transaction prices, inclusive of all forms of discounting, can be difficult to define and measure and require full respondent trust and cooperation. Some businesses (especially newly commercialised government bodies) are very cautious and regard the transaction price data as highly sensitive.

Relationship with respondents.

30. Because of the nature of some of the service industry markets, respondent relationships have to be patiently nurtured. The caution of some of the businesses has made it necessary to be very persistent in persuading them to provide the required data. Following the initial interview, it has sometimes been necessary to make repeat calls and reiterate assurances about confidentiality. In some complex areas, it has been necessary to compromise and accept second-best data initially in order to "get a foot in the door" with the aim of refining and improving the collection over time as the business becomes more comfortable in dealing with the ABS.

31. A high degree of tenacity has been necessary to establish collections from businesses in some areas; this has been extremely time consuming and frustrating.

Resources

32. The establishment of price collections in the selected service industries has proved to be very resource consuming. Unlike our general experience with goods industries, repeat contact with the proposed providers has often been necessary to obtain data. Then, once data are supplied on an ongoing basis, they have to be carefully analysed to ensure that they are on a conceptually sound basis and are generating credible time series.

33. Therefore, it is not a simple matter of a development officer establishing a collection for a selected industry, handing complete responsibility for its maintenance to a compiling officer, and then immediately moving on to investigations in a new industry. Rather, the development officer needs to have an ongoing involvement with the collection phase for, say, 6 - 12 months.

CONCLUSION

34. On balance, the early PPI service industry investigations have been successful. As well as providing valuable experience which can be applied to the future development work, it is expected that adequate-to-good price index series will be produced for the selected industries on an ongoing basis. Some of the new collections may take time, and require ongoing effort, for them to bed down and generate conceptually sound data series.