

**Pricing Business and Management Consulting:
The New Zealand Experience**

Tuesday Morning PPI Mini-Presentations (BB)

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Introduction

Business and management consultancy activities are a component of New Zealand's Business Services Producer Price Index (PPI), which was introduced in 1985-6. The original scope of the Business Services PPI was class 832 of NZSIC75; the Australia and New Zealand Standard Industrial Classification (ANZSIC) was introduced in 1996, and that scope was changed to ANZSIC96 class L78. Business Management Services are subclass L785500. See Appendix A for more detail.

This PPI is currently under review as part of a comprehensive PPI redevelopment project. This redevelopment includes the collection of new commodity proportions by industry, redevelopment of the commodity indices and items-to-price within these commodities, a reweight and rebase of the industry-level index, and the implementation of a new industrial and commodity classification systems (ANZPCC and ANZSIC06, respectively). In the interests of international statistical comparability, ANZSIC06 will, as far as practicable, align at the two digit sub-division level with the International Standard Industrial Classification of All Economic Activities (ISIC) and the North American Industry Classification System (NAICS) The ANZSIC06 subclass for management consulting will be M696200 – Management Advice and Other Consulting Services.

This paper describes New Zealand's experiences compiling price indices for business and management consultancy activities as part of the PPI.

Industry Output

ISIC and NACE definitions for this subindustry differ in that NACE separates management activities of holding companies (74.15) from business and management consultancy activities (74.14), whereas ISIC includes both in 7414. The ANZSIC definition of management consulting includes business analysis, efficiency studies, personnel management, public relations and non-government statistical studies. It does not include holding companies, which are classified as financial asset investors (K734)

Subclass L785500 is comprised of firms providing two different types of services: management consulting and public relations. This subclass has approximately 450 firms significant enough to be included in the Annual Enterprise Survey. As is typical in New Zealand, these are primarily small firms, with 86% employing fewer than 10 people. About 10% clearly identify as management firms, and another 11% identify as consulting firms. Most are some combination thereof. Approximately 5% are related to agriculture or forestry management, which are key major export revenue sources in New Zealand; these companies represent 23% of the revenue for the subclass if holding companies are excluded (see discussion below) or 6% if included. Less than 1% of firms in this classification are primarily engaged in public relations.

Approximately 5% of the firms in this subclass are primarily holding companies, and as such would normally be excluded, but are included in this classification because they are providing management services to their subsidiary companies. If included, these firms increase the total revenue of this subclass nearly fourfold, which changes the composition of this subindustry.

The services provided by this industry tend to be customized and unique to each client.

Index Methodology

Prices are obtained by quarterly postal survey with the pricing date being the 15th of the middle month of the calendar quarter. The Commodity Price Survey questionnaire is customized for each respondent and pre-printed with the most recent price history. At the present time, 19 discrete prices are collected for management consulting from 15 different outlets (two public relations firms, nine agricultural consultancies, three property valuers and one management consultancy). Because of the customized nature of the service, each price is a charge-out rate, as listed below.

1. Registered Consultant -- Hourly Rate Excluding Gst
2. Registered Farm Management Consultants. -- Consulting Hourly Rate
3. Registered Consultants -- Hourly Rate -- Excluding Gst
4. Management Consultants. Senior -- Consultant's Daily Charge -- Excluding Gst
5. Management Consultants. Senior -- Consultant's Daily Charge -- Incl. Gst
6. Senior Advisor -- Hourly Rate -- Excluding Gst
7. Public Relations Consultants. -- Senior Counselling. -- Average Charge Per Hour Basis
8. Public Relations Consultants. -- Senior Editorial Services. -- Average Charge Per Hour Basis
9. Unregistered Consultants -- Hourly Rate -- Excl. Gst
10. Registered Consultant -- Hourly Rate -- Excl. Gst
11. Public Relations Consultants. Casual -- Ad Hoc Project Work. -- Hourly Charge Out Rate
12. Public Relations Consultants. Casual -- Ad Hoc Project Work. -- Hourly Charge Out Rate Incl. Gst
13. Registered Consultant (Senior) -- Chargeout Rate Per Hour -- Excl. Gst
14. Farm Management Consultancy -- Fee: -- Basic Hourly Rate
15. Horticultural Consultant -- Hourly Rate -- Excluding Gst
16. Horticultural Consultant - Experienced -- 30 Years -- Hourly Rate
17. Registered Farm Consultants: -- Hourly Rate (Nationwide) -- Excluding Gst
18. Registered Farm Consultants (Principal) -- Hourly Rate -- Excluding Gst
19. Registered Consultant -- (Regular Clients) -- Hourly Rate

The main price determining factors are

- the type of service
- qualifications, rank and/or experience of the service provider
- the type of client
- the pricing basis (i.e. hourly or daily).

The management consulting PPI is a Laspeyre's index, calculated by dividing the price in the survey period by the price in the base period, currently 1997, and multiplying the product by 1000.

New Zealand PPIs use a hierarchical "building block" structure in which prices feed into commodity indices, which then feed into industry indices and finally into the All Industries index. Indices are calculated at the 6-digit commodity level, and then

grossed to the 4-digit working industry and above. The chart in Appendix B shows how a single management consulting service price feeds into output PPIs from the bottom up. Index weights total to 10,000.

Sampling and Weights

The size of New Zealand's economy limits the sampling options. The entire business population contains only 400,000 enterprises with (a) 2 or more employees and/or (b) sales of \$30,000 or more. Therefore, Statistics NZ price indices are based on "purposive" or judgement samples, where the sample is selected on the basis of the knowledge and judgement of staff compiling the index.

The main data source used in weighting the aggregated industry indices is the 1996 Annual Enterprise Survey (AES) conducted by Statistics NZ. The 1995 Census of Manufacturing was also used. While AES data forms the basis for the weighting of the PPI, the detailed commodity weighting information has to be gathered separately. This was primarily achieved through the Producers Commodity Survey (PCS), run separately for each industry group. Respondents to AES were stratified, and a sample selected from which to gather the lower level weighting information. AES variables for the components of Gross Output and Intermediate Consumption were used as control totals, and the information gathered was weighted to derive industry totals for the commodity breakdowns. A current list for the business services subdivision can be found in Appendix C.

A new redevelopment and concurrent collection of commodity proportions by industry for all PPIs was begun in 2004. The Business Services PPI is slated to be completed in 2007. The redevelopment, to be completed in three phases over the course of 9 years, will consist of: a collection of commodity proportions by industry and redevelopment of the commodity indices and items-to-price within these commodities; a reweight and rebase of all the industry level indices; implementation of a new industrial classification system (ANZSIC06); and the establishment and implementation of a "rolling review" programme for the commodity proportions by industry and indices within each industry to ensure the commodity proportions and indices stay abreast of real world developments. The implementation of an alternative inflation framework for the PPIs is also under consideration.

Issues in maintaining constant quality

Prior to the return of commodity price surveys, analysts prepare a report on expected results for an industry based on industry information. If the price returned is ambiguous, unexplained, or contrary to expectations, the respondent will be called for clarification.

Because prices are collected as charge-out rates, it is very difficult to adjust for quality. When a respondent reports a price increase due to labour cost, it is impossible to know what portion of that is due to providing a better service and what portion is due to market forces. As a result, the index likely shows more than pure price change.

Results and Price Measurement Challenges

The characteristics of many of the outputs of the Property and Business Services division are such that they are extremely difficult to price effectively within a price index. The Business Services industry in particular is susceptible to this problem, with the prices of the outputs of many services being represented by charge-out rates. This can lead to potential deficiencies in the price movements, due to factors such as technological change within the industry. This is a risk that cannot be avoided without considerable time being spent researching and developing models (as is currently done within the Legal Services industry) to represent these. Existing methodologies were briefly reviewed in the 1997 redevelopment and from this it was determined that there was little if anything which could realistically have been done to improve upon the pricing methodologies already in place given the time available. More time has been allotted in the current redevelopment project, and we will be considering pricing alternatives.

Appendix A: Australian and New Zealand Standardised Industrial Classification of Business and Management Consultancy

Division L - Property and Business Services

Subdivision L78 - Business Services

Group L785 Marketing and Business Management Services

Subclass L785500 - Business Management Services

This sub-class consists of units mainly engaged in providing business management services, including business analysis, efficiency or organisation and methods studies, personnel management, public relations consultancy or statistical services.

Exclusions / references

Units mainly engaged in

(a) providing data processing services are included in Sub-class L783100

Data Processing Services; and

(b) providing government statistical services are included in the appropriate classes in Subdivision 81 Government Administration.

Primary Activities

Business management service

Efficiency advisory service

Government relations

Consultancy service

Management consultancy service

Operations research service (commercial)

Public relations counselling service

Tariff consultancy service

Business statistical service (except tabulating service or government statistical services)

Environmental consultancy service (excluding laboratory service)

Lobbyist (own account)

Merchandising consultancy service

Personnel management service

Sales advisory service

Tourism development consultancy service

Appendix B: Price to Index Model

Item priced: Senior Advisor -- Hourly Rate -- Excluding Gst (7-digit)

▼ weight: 400

▼ + 25 other prices

Commodity: Other Consultant Services (6-digit)

▼ weight: 372 (effective weight of original price: 14.88)

▼ + 23 other prices and/or commodities

National Accounts Working Industry: Other Business Services (4-digit)

▼ weight: 4816 (effective weight of original price: 7.17)

▼ + 3 other NAWI-level indices

Published Industry: Business Services (3-digit)

▼

▼ weight: 3996 (effective weight of original price: 2.86)

▼

▼ + 3 other published indices

▼

ANZSIC div.: Property and Business Services (1-digit)

▼ weight: 629 (effective weight of original price: .67)

▼ + 47 other published indices

All Industries

Appendix C: Business Service Inputs and Outputs

L04

BUSINESS SERVICES
ANZSIC Division L, Subdivision 78
Weighting Base: 1994

INPUTS		OUTPUTS	
Percentage of Total Inputs in Industry		Percentage of Total Outputs in Industry	
Materials	0.2	Research & Technical Services	18.4
		Engineering Services	7.6
Fuel & Power	1.9	Scientific Research Services	5.0
Electricity	1.0	Architectural Services	4.2
Gas and Petroleum Fuels	0.9	Other Technical Services	1.6
Repairs & Maintenance	5.7	Computer Services	10.9
Buildings	5.3	Data Processing & Storage	8.7
Vehicles and Transport Equipment	0.4	System Design	1.8
		Computer Maintenance	0.4
Transport & Storage	1.1	Legal & Accounting Services	21.8
Communication	8.5	Accounting Services	9.3
Telecommunications Services	6.5	Corporate Legal Services	8.6
Postal & Courier Services	2.0	Personal Legal Services	3.9
Finance & Insurance	3.1	Other Business Services	46.1
Insurance (Net of Claims)	2.6	Management Fees	12.1
Finance (Excluding Interest)	0.5	Packaging Services	11.3
		Advertising & Marketing	10.4
Property Services	12.2	Pest Control & Cleaning Services	4.4
Rent of Land & Buildings	10.4	Other Business Services	3.4
Rent of Vehicles, Machinery & Equip	1.8	Security and Investigation	2.7
		Other Consultancy Fees	1.8
Business Services	41.5	Other Outputs	2.8
Computer Services	13.6	Miscellaneous	1.4
Other Business Services	11.8	Goods Purchased for Resale	0.9
Scientific & Technical Services	6.0	Renting & Leasing of Land & Buildings	0.5
Management Fees	3.9		
Advertising	3.3		
Legal & Accounting Services	2.0		
Cleaning Services	0.9		
Other Expenses	25.8		
Travel (including Accommodation & Meals)	10.5		
Printing & Stationery	10.2		
Miscellaneous	5.1		
Total	100	Total	100

Notes:

- * The regimen summarises weights applied to commodities included in the index
- * Weights are derived from estimates of approximate basic value and intermediate consumption expenditure
- * Items with small weights (usually less than 1%) may not be individually specified above
- * Rounding error may occur