

Methodology of the Monthly Index of Services

Other Service Activities Industry Review

Introduction

At the launch of the experimental Index of Services (IoS) in December 2000, a commitment was made to review and improve where practical, the sources and methods used to measure the service sector. This paper outlines the findings of the Other Service Activities Industry Review.

Summary

The industry review for Activities of Other Service Activities has recommended:

- the introduction of more appropriate Retail Price Index (RPI) deflators into the processing of Other Service Activity value data
- the temporary suspension of the indicator used to measure Other Services not elsewhere classified on the basis of the inappropriateness of the indicator.

Although the methodology will be changed all the way back to 1994 in the IoS and GDP(O) systems, only the period from 1995 will be revised at Blue Book 2006.

How important are the Other Service Activities?

In terms of Gross Value Added (GVA) weights in 2004, Other Service Activities (SIC⁵ Division 93) represents:

- 0.8% of the IoS
- 0.6% of Total GVA

Other Service Activities are published as part of the Government and Other Services⁶ component within the IoS.

⁵ The SIC is the Standard Industrial Classification, and this is the classification system used in the UK to define industrial groupings. The 4-digit refers to the level of detail and is generally the level at which data is collected and aggregated from within GDP(O) and IoS. More detail on this can be found in the IoS Methodology documentation

⁶ This covers the following sections of the UK SIC: L Public Administration and Defence; Compulsory Social Security, M Education, N Health and Social Work, O Other Community, Social and Personal Service Activities, P Private Households Employing Domestic Staff and Undifferentiated Production Activities of Households for Own Use

Methodology

Previous methodology⁷

Within Division 93 there are five 4-digit SICs⁸, which are grouped into four composite SIC groups. The table below gives the detail of the methodology that was previously used:

Table 1

SIC	Industry Description	Output Indicator	Source	Current Deflators	GVA weight per 1000
93.01	Washing and dry cleaning of textile and fur products.	Deflated gross turnover	MIDSS	HE Laundry & Dry Cleaning	0.7
93.02	Hairdressing and other beauty treatment.	Deflated gross turnover	MIDSS	RPI Hairdressing	1.2
93.03	Funeral and related activities.	Deflated gross turnover	MIDSS	RPI Personal Services	0.4
93.04 & 93.05	Physical well-being activities and other service activities nec.	Deflated gross turnover	VAT	RPI Personal Services	4.0

Key to table:
HE - ONS data for Household final consumption expenditure, RPI – ONS Retail Price Index, MIDSS - ONS Monthly Inquiry into Distribution and Services Sector, VAT – Value Added Tax supplied by Customs & Excise.

For the first three groups (93.01 to 93.03), deflated MIDSS turnover was used as the proxy to measure GVA. Deflated VAT turnover data were used as the proxy for data for 93.04/5.

An implied deflator derived from household expenditure data was applied to 93.01, while 93.02, 93.03 and 93.04/5 were deflated by RPIs. In order to improve volume estimates investigation was undertaken to determine whether the currently applied deflators were the most appropriate.

Reasons for review

Group 93.04/5 were measured using VAT data as the turnover source, whereas MIDSS was seen as the preferred data source for a monthly turnover service industry series. The predominant reasons being that VAT data were:

- not timely enough for inclusion in the first publication of the IoS
- only pseudo-monthly (most VAT returns are made quarterly)
- not compatible with pre-1996 data as a different industrial classification system was used

Investigation was undertaken to improve this indicator.

⁷ In this report, the previous methodology refers to the methodology used prior to Blue Book 2006, and the new methodology to the methodology taken on at Blue Book 2006

⁸ See SIC 2003 documentation for details of the full breakdown of division 93 in the UK SIC - <http://www.statistics.gov.uk/sic2003>

Group 93.01 used an implied deflator derived from the Household Expenditure inquiry, while 93.02, 93.03 and 93.04/5 used RPIs as outlined in the table below.

Table 2

Industry	Description	Current	Issues
93.01	Washing & dry cleaning of textiles.	HE Laundry & Dry Cleaning	This was an implied deflator and as such may contain adjustments that are not relevant to pricing. There was no longer an RPI collected for laundry services. There were no provisions for business to business services made.
93.02	Hair dressing.	RPI Hairdressing	This was a Eurostat A method utilising the most suitable RPI.
93.03	Funeral activities.	RPI Personal Services	Personal services comprised of the following: hairdressing, eye tests, dental charges, leg wax, private medical charges, slimming clubs, nursing homes & delivered flowers. None of these were directly applicable to funerals.
93.04/5	Physical wellbeing etc.	RPI Personal Services	As above.

In order to improve volume estimates, an investigation was undertaken to determine whether the deflators used were the most appropriate

What should we be doing?

In October 2001, Eurostat (European Union's Statistical Office) published the '[Handbook on Price and Volume Measures in National Accounts](#)'. The handbook provides guidance by product, on what price and volume methods should ideally be used (A methods), are acceptable methods (B methods) and those methods that should not be used (C methods). The handbook has been written in the context of annual data but the same rules apply to sub-annual data.

What do Eurostat recommend for Division 93?

This product division covers a very wide range of services, the most significant being;

- 93.01 Washing & Dry Cleaning Services - The use of CPI and volume data were both considered B methods.
- 93.02 Hairdressing - CPI data represent an A method if a suitable adjustment was made to the basic prices.
- 93.03 Funerals - CPI data represents an A method if a suitable adjustment was made to the basic prices.
- 93.04/5 Other Services – The use of standard pricing was considered an A method provided that all quality effects were taken into account and a B method otherwise.

Issues faced by the industry review

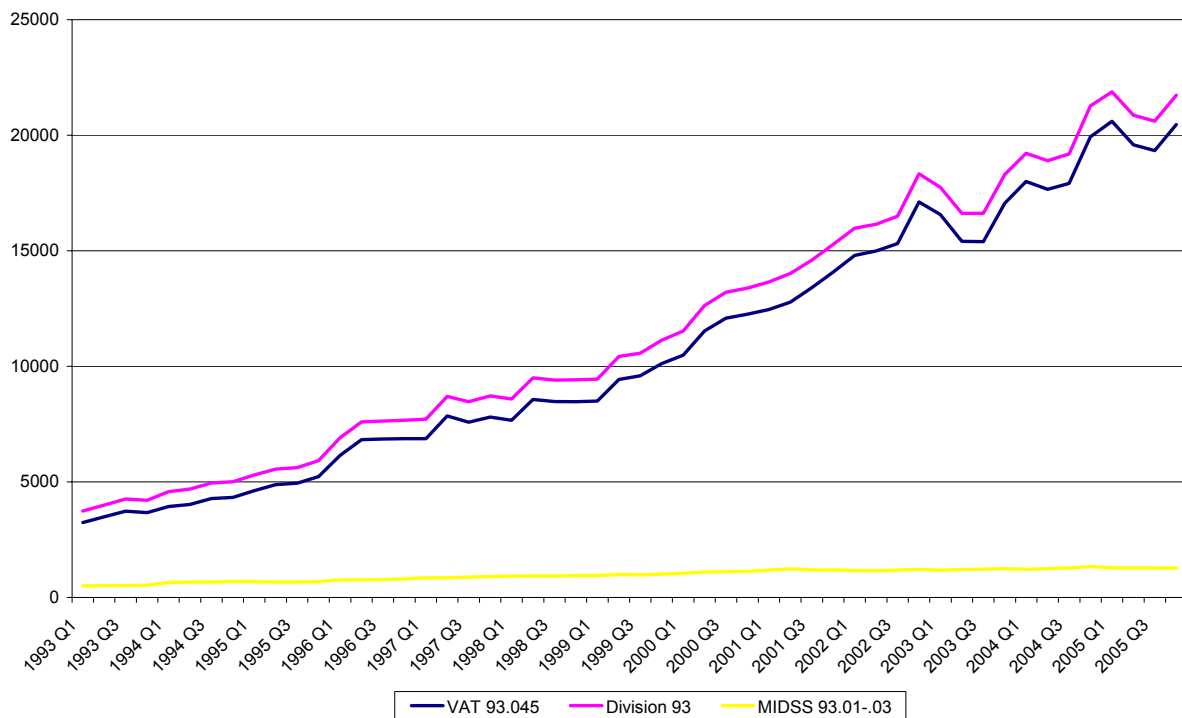
Review the suitability of the proxy currently used to measure the combined industry 93.04/5

The value of the VAT series used to measure 93.04/5 was disproportionately large in comparison to the MIDSS data collected to measure the rest of the division. As a result, the movements in the series were dominated by the VAT series. Thus, the contribution of MIDSS only served as a minor level shift in the divisional series.

This is illustrated in the graph below.

Figure 1

A Breakdown of the Div 93 Proxy (£'m)



Physical Well-being Activities and Other Services not elsewhere classified contains a large number of small niche businesses. Industry 93.04 contains services such as health farms and public baths, whereas 93.05 contains services such as town criers and pavement artists. Intuitively one would expect that the output of 93.01, 93.02 and 93.03 to be significantly larger than 93.04/5 since washing & dry cleaning services, hairdressing and funeral services are by far more commonly used services. However, 63.2% of the GVA weight associated with division 93 came directly from 93.04/5.

The GVA weights are based on Annual Business Inquiry⁹ data. It is in part, a financial inquiry covering approximately two thirds of the UK economy. The contributor selection of

⁹ Detail of the Annual Business Inquiry can be found at <http://www.statistics.gov.uk/abi/>

this inquiry is based on the ONS's own business register. However, the classification is a catch all for miss-classified service businesses making the universe disproportionately high.

Although the ONS and HM Revenue & Customs (HMRC) use the same industrial classification, how companies are classified differs. The net result has been more companies being classified to the not elsewhere classified industry in the HMRC classification.

A MIDSS series covering 93.04 was collected by the ONS whereas data for 93.05 were not. Obviously introducing this MIDSS series as a substitute for VAT to measure 93.04/5 would have resulted in under coverage. After in-depth quality assurance of those contributors currently classified to 93.05 the introduction of a combined 93.04/5 series would have been the most desirable option.

The preferred option available at this time was to exclude the VAT series covering 93.04/5, to re-weight the division covering 93.01/2/3 only and to recommend quality assurance of 93.04/5.

Once the quality assurance of 93.05 is completed it was recommended that the 93.04/5 MIDSS series be reintroduced and the weights re-portioned across the division.

Recommendations

- 1. Exclude the VAT series covering 93.04/5 and re-weight the division to cover 93.01/2/3 only.**
- 2. Extend MIDSS collection to 93.05 and once re-introduce the MIDSS series as soon as appropriate.**

Deflation

In order to improve volume estimates an investigation was undertaken to determine whether the deflators used were the most appropriate. The issues surrounding deflation in division 93 are outlined in table 2 above.

It had been highlighted that 93.01 used an implied deflator derived from Household Expenditure data. This series did not take into account any business-to-business cleaning services such as those supplied to hospitals for the cleaning of linen. The weighted combination of the RPI for dry cleaning and the CSPI for washing and dry cleaning was accepted as an improved, more robust deflator than previously used.

The deflator for 93.03 was the RPI for personal services which is comprised of the following; hairdressing, eye tests, dental charges, leg wax, private medical charges, slimming clubs, nursing homes and delivered flowers. None of these were directly applicable to funerals. ONS calculate an RPI specifically for funeral services. This was accepted as an improved, more robust deflator than that currently used.

Table 3

Industry	Options	Recommendation
93.01	HE Laundry & Dry Cleaning	RPI Dry Cleaning Man's Suits combined with the CSPI for washing and dry cleaning.
93.02	RPI Hairdressing	Remain unchanged.
93.03	RPI Personal Services	RPI Funeral - Cremations.

Recommendations

- 3. Replace the HE deflator for laundry & dry cleaning used in 93.01 with the RPI for dry cleaning men's suits combined with the CSPI for washing and dry cleaning.**
- 4. Replace the RPI for personal services used in 93.03 with the RPI for funerals and cremations.**

Weights

The exclusion of any industry would require a recalculation of the GVA weights within the division based on Annual Business Inquiry data in order to re-apportion the outputs across the divisions accordingly.

Division 93 had a GVA weight of 6.0 distributed across five SIC classes (though 93.04 & 93.05 were combined as one indicator with a single GVA weight).

Table 4

Industry	GVA Weight	New GVA Weight
Total	6.0	
93.01	1.1	$(1.1 / 3.2) \times 6.0 = 2.1$
93.02	1.6	$(1.6 / 3.2) \times 6.0 = 3.0$
93.03	0.5	$(0.5 / 3.2) \times 6.0 = 0.9$
Sub Total	3.2	
93.045	2.9	Excluded

The above calculations were based on 2000 weights and serve as an example only.

These changes are outlined in the table below:

Table 5

SIC	Industry Description	Output Indicator	Source	Deflators	GVA weight per 1000
93.01	Washing and dry cleaning of textile and fur products	Deflated gross turnover.	MIDSS	RPI Dry Cleaning Man's Suits & CSPI for washing and dry cleaning.	2.1
93.02	Hairdressing and other beauty treatment	Deflated gross turnover.	MIDSS	RPI Hairdressing	3.0
93.03	Funeral and related activities	Deflated gross turnover.	MIDSS	RPI Funeral - Cremations.	0.9

Key to table:
CSPI - ONS Corporate Service Price Index, RPI – ONS Retail Price Index, HE - ONS data for Household final consumption expenditure, MIDSS - ONS Monthly Indicator into Distribution and Services Sector, VAT – Value Added Tax supplied by Customs & Excise.

Who was consulted as part of the Industry Review process?

Within the ONS, there was comprehensive consultation with relevant teams both within National Accounts and in the survey areas.

New methodology

In summary the industry review for division 93 has made the following recommendations that were implemented at Blue Book 2006:

- Exclude the VAT series covering 93.04/5 - Re weight the division covering 93.01/2/3 only.
- Quality assurance of companies classified to 93.04/5, extend MIDSS collection to 93.05 and once completed reintroduce the MIDSS series as soon as appropriate
- Replace the HE deflator for laundry and dry cleaning used in 93.01 with the RPI for dry cleaning men's suits combined with the CSPI for washing and dry cleaning.
- Replace the RPI for personal services used in 93.03 with the RPI for funerals and cremations.

Benefits and issues of new methodology

The main benefits and assumptions of the proposals have been summarised in the table below:

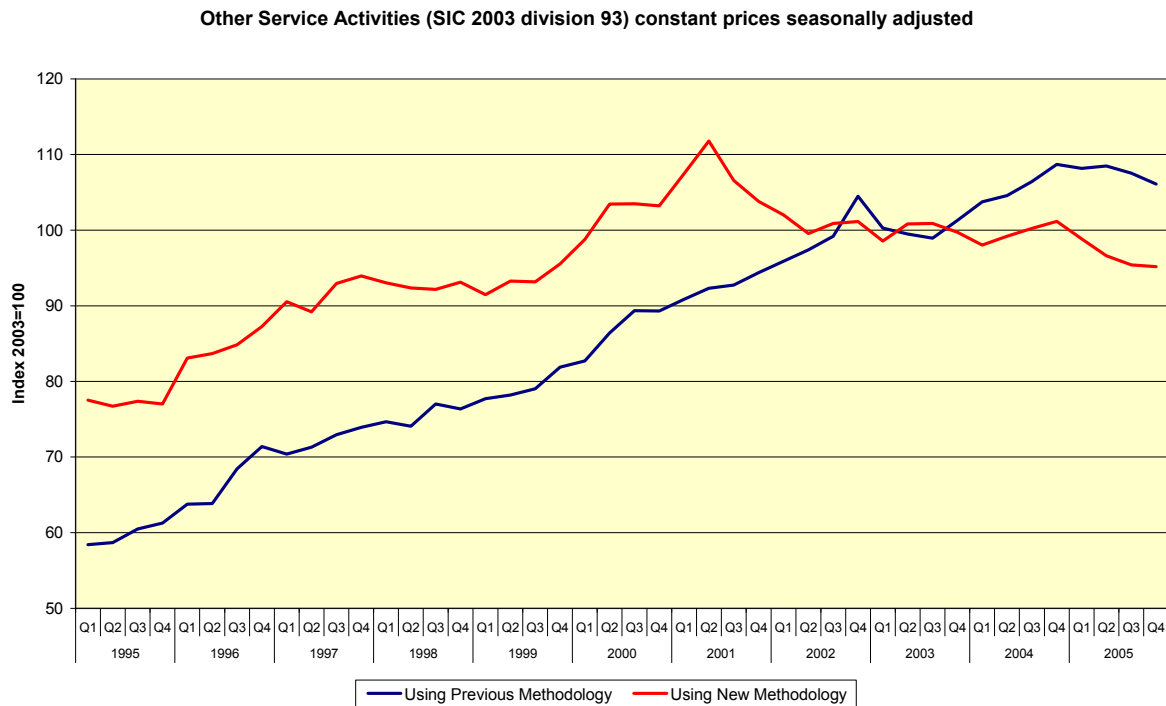
Table 6

Benefits		Assumptions
The improved measurement of the division as a whole by the removal of an inappropriate VAT proxy.	v	93.04/5 move in the same direction as the rest of the division.
The improved deflation of other service activities output including the removal of implied deflators.		

Impact of new methodology

The graph below shows the impact of the new methodology on Division 93. The data have been revised back to January 1995 in line with the open period for revisions set-out in the National Accounts Revisions Policy for Blue Book 2006.

Figure 2



Contact Information

Any questions or comments on this article are welcome, as are offers to participate in the process of improving industry sources and methods. Any enquiries should be addressed to:

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References

Drew S and Morgan D (2003). *Experimental monthly index of services – An update*. Economic Trends, No. 599. Available for download from <http://www.statistics.gov.uk/CCI/article.asp?ID=476>

Drew S and Morgan D (2005). *Experimental monthly Index of Services: Development programme update*. Economic Trends, No. 620. Available for download from <http://nswebcopy/CCI/article.asp?ID=1188>

Eurostat (2001). *Handbook on price and volume measures in national accounts*, ISBN 92 894 2000 6. Available for download from: http://europa.eu.int/comm/eurostat/Public/datashop/print-catalogue/EN?catalogue=Eurostat&product=KS-41-01-543-__-N-EN

Office for National Statistics (2002). *IoS Documentation*. Available for download from: <http://www.statistics.gov.uk/iosmethodology>

Pike R and Reed G (2000). *Introducing the Experimental Monthly Index of Services*. Economic Trends, No. 565, pp. 51–68. Available for download from <http://www.statistics.gov.uk/CCI/article.asp?ID=68>

Pike R and Drew S (2002). *Experimental Monthly Index of Services*. Economic Trends, No. 583, pp. 70–78. Available for download from <http://www.statistics.gov.uk/CCI/article.asp?ID=138>