

# Methodology of the Monthly Index of Services

## Taxi Operation

### Introduction

At the beginning of 2008 Her Majesty's Revenue and Customs (HMRC) moved the classification of their VAT system to SIC 2007 –the latest revision of the international Standard Industrial Classification. The ONS has received VAT data aggregated at the five-digit SIC level and processed it to produce monthly and quarterly turnover data. As a consequence, this data can no longer be processed using the current system. Gross Domestic Product Output (GDP(O)) and Index of Services (IoS) rely on several VAT series as value data in their system. This review focuses on replacing these VAT series in division 60, for SIC 60.22 Taxi operation.

### Summary

The industry review for taxi operation has recommended:

- to replace existing VAT series with the ONS Monthly Inquiry into Distribution and Services Industries (MIDSS) turnover series
- to deflate this with the RPI for taxi fares and minicabs

Although the methodology will be changed all the way back to 1994 in the GDP(O) system, only the open period from 2005 will be revised. The recommendations of this review will have little impact on top level Gross Domestic Product (GDP) for the open period.

### How important is taxi operations?

In terms of Gross Value Added (GVA) weights in 2005, consistent with Blue Book 2009, taxi operations (SIC<sup>1</sup> Division 60.22) represents:

- 0.1 per cent of the IoS
- 0.08 per cent of total GVA

Taxi operation is published as part of the Transport, Storage and Communications<sup>2</sup> component within the IoS.

### Methodology

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<sup>1</sup> 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 at <http://www.statistics.gov.uk/iosmethodology>

<sup>2</sup> This covers section I of the UK SIC

### Previous methodology<sup>3</sup>

Table 1 below gives the details of the class as well as the methodology that was previously used:

**Table 1**

SIC	Description	Output indicator	Source	Deflator	GVA wt in 2005 (GDP=1000)	% of division
60.22	Taxi operation	Turnover from VAT returns (£ million)	HMRC	HE: Taxi fares	0.8	4.1%
		HE on taxi fares deflated at source	HE	Deflated at source		

VAT – Value Added Tax, HMRC - Her Majesty's Revenue and Customs, HE – Household Expenditure

For taxi operation, turnover deflated by the implied Household Expenditure (HE) deflator for taxi fares combined with the HE deflated at source were used as the proxy. The turnover source was from Value Added Tax (VAT) returns, supplied by HMRC.

### Reasons for review

The main reasons for reviewing SIC 60.22 taxi operation are as follows:

- loss of VAT on SIC 2003 basis
- the potential to move to an internal ONS turnover source (MIDSS)

### 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), on what are acceptable methods (B methods) and on 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.

The handbook gives some guidance for this industry and reinforces the general view that deflated turnover is preferred for market output, deflated by quality adjusted series that represent the services provided. Volume indicators based on passenger-kilometres and tonnes-kilometres are acceptable. The more detail available the better will be the result.

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<sup>3</sup> In this report, the previous methodology refers to the methodology used prior to Blue Book 2009, and the new methodology to the methodology taken on at Blue Book 2009

## Issues faced by the industry review

A summary of the key features, output definition, issues and recommendations for SIC 60.22 taxi operation follows:

### Key features

Taxis and private hire vehicle's are increasingly seen as an important mode of local transport, particularly at times when local buses or trains run infrequently or have stopped for the night and also in areas that are poorly served by other public transport. Taxis are particularly important to people without access to their own car or household cars, including younger and older people, people in low income households, and people with difficulties in mobility. The market also suggests that taxi activity in London is predominately higher with a 30 per cent share of all taxi operations within the UK. Taxis are less than ten per cent of the land transport division.

It is also important to note that taxis shadow changes in national economic performance fairly closely. The Department for Transport (DfT) states that this is for the reason that "some taxi use is discretionary, partly because in large urban areas a significant amount of use is for business purposes and therefore reflects economic activity" (Forecast in changes in the taxi parc, 18/02/05).

### Issues

- VAT data is not available and therefore deflated turnover from VAT returns can no longer be used as a measure for taxi operations
- HE data on taxi operations is an unreliable source as households underestimate irregular expenditure including taxi fares
- The current market measure for taxi operations does not cover unlicensed taxis or business to business use of taxis.

The review recommended that taking on the internal ONS MIDSS data as the current price source would be an improvement over the current source, as it is timely, has briefing and is designed to represent all organisations classified to this SIC.

### Recommendations

**1. Replace current measure of reflatd turnover from VAT returns and HE on taxis with new Monthly Inquiry into Distribution Services Sector (MIDSS) data on taxi operations.**

## 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. In terms of external consultations we are grateful to the assistance received from the Department for Transport and the Local Government Association.

## New methodology

In summary the industry review for taxi operations has made the following recommendations that were implemented at Blue Book 2009:

- replace HE and VAT data with MIDSS data for taxi operation

## Benefits and issues of new methodology

**Table 2**

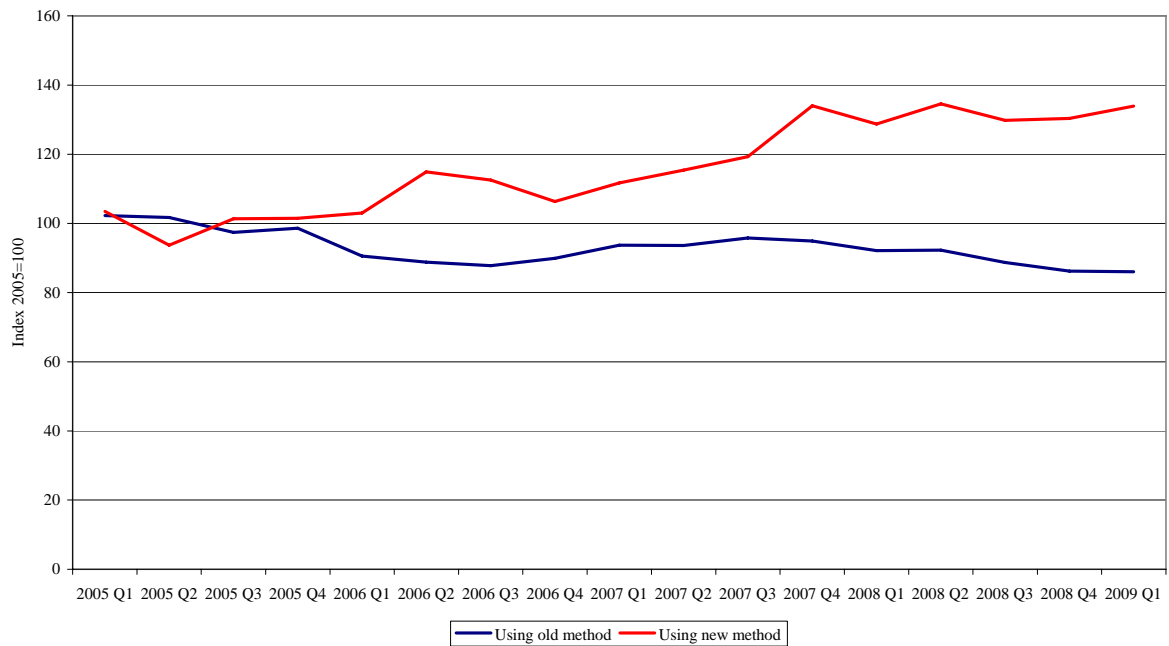
Benefits	<b>V</b>	Assumptions
MIDSS on taxi operation provides a better coverage of division 6022		Data collection costs ONS money and places a burden on business. Changing the quality of MIDSS data to reflect the long-term outputs can prove timely and costly
MIDSS data is a monthly measure of taxi operation where as VAT is a quarterly measurement which is extrapolated in a monthly format		
The new MIDSS collection for taxi operation will hold a Eurostat rating of B		MIDSS and previous methods to estimate taxi operation are still missing elements of taxi usage including what happens to the tips made to drivers and whether increasing motoring costs are passed onto the consumers
Where taxi operation is planned to be introduced, data will now be available for first estimate of IoS and second estimate of GDP(O) in 2010		
More appropriate deflator being used		

## Impact of new methodology

The graph below shows the impact on the industry of the introduction of new methodology on SIC 60.22. The data has been revised back to January 2005. This in line with the open period for revisions set-out in the National Accounts Revisions Policy for Blue Book 2009.

**Figure 1**

Taxi operations (SIC 60.22) constant prices seasonally adjusted



## 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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# Annex 1

## Comparison of new and old methods

Group/ Class	Industry Description	Previous Output Indicator	Previous Deflators	New Output Indicator	New Deflators	GVA weight per 1000	Weight within division
60.22	Taxi operation	Deflated turnover from VAT returns HE taxi fares at 1995 prices	HE: Taxi fares Deflated at source	MIDSS	MIDSS taxis operations deflator	0.8	1.1
<small>HE – Household Expenditure, VAT - Value Added Tax, MIDSS – Monthly Inquiry of the Distributive and Service Sectors, RPI – Retail Price Index, SPPI – Service Producer Price Index, PPI – Producer Price Index</small>							

## References

Eurostat (2001) Handbook on price and volume measures in national accounts, ISBN 92 894 2000 6.

[Europa.eu.int/comm/Eurostat/public/datashop/print-catalogue/EN?catalogue=Eurostat&product=KS-41-01-543-\\_-N-EN](http://Europa.eu.int/comm/Eurostat/public/datashop/print-catalogue/EN?catalogue=Eurostat&product=KS-41-01-543-_-N-EN)

Local Government Association (20/08/08) “Rank actions of bogus cabs prompt councils to act” <http://www.lga.gov.uk/lga/core/page.do?pageId=874445>

Department for Transport (18/02/2005) ‘Forecast of changes in the taxi parc’  
<http://www.dft.gov.uk/foi/responses/2005/feb/accessibilityregs/annex2forecastofchangesinthe2212>

Statistics New Zealand (30/06/01) Household Economic Survey: Technical notes...  
<http://www2.stats.govt.nz/domino/external/pasfull/pasfull.nsf/7cf46ae26dcb6800cc256a62000a2248/4c2567ef00247c6acc256ca80082e75b?OpenDocument>