Introducing the Experimental Monthly Index of Services

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Summary

This article presents for the first time an experimental constant price monthly Index of Services (IoS) and describes the development project to review and improve the indicators used to estimate short-term change in service industry output. This is an important step in the ONS response to the customer demand for this information and completes the first phase of the IoS work programme outlined in *Economic Trends* in October 1999[1]. Results will be published each month from now on: initially as an experimental index.

The experimental monthly IoS is based on a range of data collected monthly, quarterly and annually. The proportion of monthly data will increase from its current level of about 40 per cent as suitable new monthly data sources become available. When fully developed the monthly IoS will provide a timely indicator of growth in service industries and, along with the monthly Index of Production (IoP), will assist economists in monitoring changes in growth and detecting turning points in the economy.

- The experimental monthly IoS is a first step towards providing, for the service industries, the periodicity, range and quality of output indicators that have existed for the production industries for many years.
- The IoS development programme aims to meet demand for monthly services' output indicators from users of economic data, including HM Treasury, the Bank of England and the City. The fully established IoS will move us towards monthly GDP.
- It is being released as an experimental index, to inform users of progress and to obtain feedback. Data are given from January 1995 to August 2000.
- The experimental monthly IoS is based on about 40 per cent monthly data. This will increase as new monthly sources are taken on from 2002/3. Revisions will occur as improved data sources are included.
- The IoS capitalises on the ONS' investment during the 1990s in surveys of service activities (e.g. turnover and prices), an area where we are among the world leaders.
- As the next stage of a challenging development programme, from May 2001 for the distribution industries we expect to speed up the release of information by a month and drop the 'experimental' label.
- A five way split of monthly service industry detail is provided. As the range of monthly data increases, the aim is to publish more detailed indices.

This set of monthly IoS figures is consistent with GDP(O) estimates published on 20 October.

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This article is in six sections:

- Conceptual basis for the IoS, its relationship with GDP(O) and the national accounts;
- Work done to produce this experimental index;
- Data sources and the proportion of monthly information;
- Future plans;
- Conclusion;
- The first set of results.

Service industries overall account for around 70 per cent of GDP. Monthly IoS results will be published each month from now on: initially as an experimental index. This experimental monthly IoS uses the same concepts and data sources as the output approach to measuring GDP for the services. IoS development plans aim to:

- extend the range of monthly indicators:
  - converting quarterly turnover inquiries to monthly
  - investigating alternative sources;
- review the methodology of existing indicators:
  - follow EU guidance on measurement of price and volume
  - make the most of turnover and price information available;
- improve the timeliness of the experimental monthly IoS.

Section 1 – Conceptual basis for the IoS, its relationship with GDP(O) and the national accounts

The conceptual basis of the output measure of GDP - GDP(O) - applies to all its components, to the index of industrial production (IoP) and in future also to the IoS: the article in October 1999 *Economic Trends* refers[1]. (See Box: Measurement of gross value-added (GVA) - for GDP(O) and IoS - in the UK Economic Accounts.) The new monthly IoS is intended ultimately to replace the present quarterly total services index within GDP(O) - it shares exactly the same industry coverage and will be consistent with the corresponding quarterly series in GDP(O).

The two largest components of GDP(O) cover production and services. The IoP has been based on mainly monthly indicators for many years, while the service sector has relied on mainly quarterly indicators. The statistics on production are more detailed and more established than those on services. The introduction of the monthly IoS, with related developments in monthly data collection, will help correct this imbalance in the quality of output components.

Within the IoS, IoP and GDP(O), indicators used to estimate short-term change are selected for their:

- appropriate industrial coverage;
- consistency over time; and
- suitable quality and timeliness.

For current-price indicators the choice of indicator also takes account of the need for suitable deflators (see Box: Indicators used to measure short-term change in gross value-added (GVA) for GDP(O) and the IoS).

The categories used for classifying industries in the experimental IoS, the IoP and for GDP(O) are the UK version of the latest international standard classification of industries, usually abbreviated to the 'SIC92'. Using this, industry indicators are combined together according to their relative contribution to total GDP, based on their gross value-added. At present these contributions, or 'weights', are updated every five years. (See GSS Methodology Series report no. 15: *Gross Domestic Product: Output Approach (Gross Value Added)*[2]). On this basis – using indirect indicators - GDP(O) and the IoS serve primarily as measures of short-term change in economic output. In order to have their longer term movements re-set periodically, GDP(O) (and in future the IoS and the IoP) is benchmarked or balanced against the other measures of GDP.

Effects of national accounts revisions policy and balancing

The IoS will follow the national accounts revisions policy and practices[3]. Quarterly averages of the monthly IoS index numbers

Measurement of gross value-added (GVA) - for GDP(O) and IoS - in the UK Economic Accounts

The UK economic accounts are based on the European System of Accounts (ESA)[4] which in turn is based on the UN System of Accounts (SNA)[5]. Under the ESA, the level of gross value added (**GVA**) for each industry is measured in basic prices as:

GVA = outputs	***less*** inputs
Or, in more detail:	
GVA = turnover	***less*** purchases for intermediate consumption
	plus changes in inventories
	plus own account capital formation

GDP is measured at market prices and is the sum of the industry **GVA** estimates, plus taxes on products (e.g. value added tax, alcohol duty), less subsidies on products[6].

will match the quarterly industry index series published in GDP(O), both at the overall aggregate level, where the aggregate IoS will match the quarterly 'total services index' in GDP(O), and for individual service industry series.

Indicators used to measure short-term change in gross value-added (GVA) for GDP(O) and the IoS.

It is impractical to collect the data relating to each industry which are necessary to carry out the GVA calculation every month or quarter. So the IoS and GDP(O) generally use indirect indicators to assess the short-term change in gross value-added.

- For a small number of industries it **is** practicable to calculate value-added directly every month/quarter, where the necessary details of industry inputs and outputs, and their prices, are available. For such industries direct industry value-added measures are obtained.
- Elsewhere the 'ESA-preferred' type of output indicator is one which measures deflated gross output (or turnover) for an industry. These use an appropriate price change estimator to remove the effects of inflation.
- The use of volume indicators is also acceptable under ESA regulations. This requires no deflation but will usually miss quality changes, or changes in the mix of outputs.
- Other types of indicator, which measure inputs to an industry, are not now regarded as satisfactory, but for some industries they are the only short-term indicators available. The most obvious and widely used of these is employment.

A separate quarterly national accounts estimate of GDP is produced in each of the three months of the quarter. These are termed the 'preliminary'[7], 'provisional', and 'final' GDP estimate for each quarter. Most of the time no revisions are made to earlier quarters for the preliminary or provisional GDP estimates. For the 'final' estimate each quarter, revisions to earlier quarters *are* made, but on a controlled basis for a specified number of earlier quarters. The annual *Blue Book* process allows historical figures to be revised for a longer period. The purpose of this control over revisions is to avoid creating uncertainty and unnecessary cost to users by frequently revising long runs of data for relatively minor changes. The GDP(O) index numbers for the period open for revisions (also the IoP and in future the IoS) are always designed to show the estimate of short-term change in the series.

The quarterly national accounts estimate of GDP is arrived at by 'balancing' the output, income and expenditure measures of GDP[3]. These three measures are balanced by applying quarterly 'coherence adjustments' to reduce any inconsistencies between them[7]. The result, for each quarter's estimates, is a consistent and firm view of GDP. Where coherence adjustments are applied to the service industries within quarterly GDP(O) they are also included within the corresponding components of the monthly IoS.

Section 2 - Work done to produce an experimental monthly IoS

The background to the IoS development was described in an article in October 1999[1]. The 'prototype' Index of Distribution (IoD) was released in December 1999[8]. This section of the article covers the development of a computer system, the recruitment of a team of people to work on the experimental monthly IoS, together with quality assurance and seasonal adjustment of the monthly series. It also explains the achievements in two key areas: the improvement of survey methodology and the collection of monthly data.

Computer system

The IoS computer system is based on the design and structure of the system used to produce quarterly estimates of the service industries for GDP(O). It has additional features, for example benchmarking to quarterly GDP(O) estimates and interpolation to produce monthly estimates where necessary. The IoS system was in place by June 2000.

Building the IoS team

Over the past twelve months the number of people working within the IoS team has increased from five to fifteen. This team includes those who will be responsible for producing the monthly IoS and those who will focus on improving the methodology. The IoS and the GDP(O) teams have recently been brought into the same Division (Short Term Output Indicators Division). This strengthens the links between the two and facilitates progress in the IoS development programme.

Quality assuring and seasonally adjusting the data

Between March and August 2000 the team quality assured over 100 monthly series back to January 1995, introducing quality adjustments where appropriate. The quarterly GDP(O) team worked closely with IoS providing advice and assistance. During September we reviewed and improved the seasonal adjustment of IoS components.

Increasing the proportion of monthly data

The development of service sector turnover inquiries began in the early 1990s[9]. Their quality is being improved for the experimental monthly IoS by including more actual monthly data. Since April 2000 around 70 per cent of ONS quarterly turnover inquiries have been converted to monthly, the remainder are to be converted to monthly in January 2001. It will be some time before the monthly data sources can be considered for inclusion in the IoS and GDP(O) (see below).

Methodological improvements

The ONS introduced quarterly turnover inquiries for parts of the service sector in 1991, to provide turnover results for use as short-term indicators of value added for the output measure of GDP[9]. This allowed the ONS to begin publication in April 1993 of the preliminary estimate of quarterly GDP to a much earlier timetable than had previously been possible. However some of the new series had a high level of unexplained volatility. Considerable improvements have been made in this difficult statistical area but some turnover series are still not used by IoS and GDP(O) compilers because of concerns about quality. Two thirds of individual returns from businesses currently feed directly into estimates for IoS and GDP(O), while others are used for comparative analysis.

The IoS development programme has given impetus to investigating the cause of volatility with the aim of making more turnover series suitable for inclusion in GDP(O) and the IoS. Some of the problems are due to sampling practice (see Review of Short-Term Output Indicators, Annex D[10]) and some steps have already been taken to improve the survey methodology (see box: 'Improvements made to monthly and quarterly sources').

Improvements made to monthly and quarterly sources

- To improve the early estimates of services turnover, since October 1999 extra effort has been put in to encouraging early responses to survey forms. Response rates have been improved to achieve around 80 per cent response within 4 weeks.
- Firms with high turnover (greater than £40 million) and relatively low employment (between 10–99) caused discontinuities when rotated in and out of sample strata. Since January 2000 they are included in the sample every month.
- Smaller firms (10–99 employees) stay in the survey longer, which reduces the discontinuities each makes when sample members are dropped and new ones introduced.
- Since January 2000 outliers are being treated differently. The new procedures detect more unrepresentative returns and prevent them distorting movements in the series.

Deflation

To make full use of the available industry turnover data, good quality industry-specific data on prices are needed for deflation. Where there is no industry-specific index, deflators are constructed from other indicators, such as the Retail Prices Index and average earnings indices. These are less satisfactory as they may not reflect the movements in specific industries.

Monthly Retail Prices Indices are available for the most important services sold directly to consumers, such as vehicle insurance and hairdressing. However around half of the GVA in private sector services comes from business-to-business or 'corporate' services, such as accounting and software consultancy. The ONS is developing a range of Corporate Services Price Indices (CSPIs) to improve this position. An article in the July 2000 *Economic Trends* explains the latest developments in this project[11].

Section 3 - Data sources and proportion of monthly information

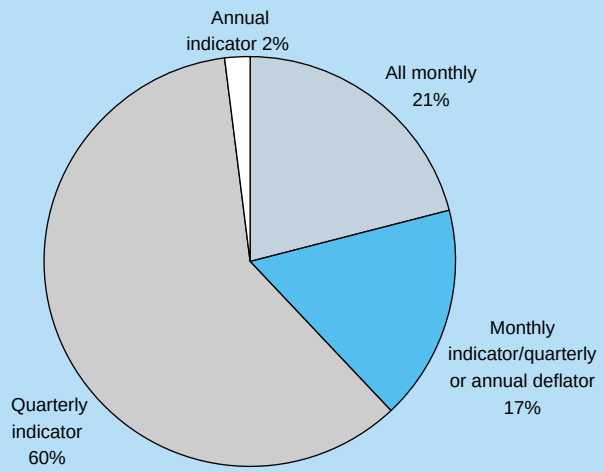
This section looks at the proportion of monthly data used in the five published categories of the experimental monthly IoS. It also provides details of the type of indicators used. The IoS development project aims to increase the proportion of monthly data.

Proportion of monthly information

Chart 1 shows the proportions of IoS data, by gross value added weight, derived from monthly, quarterly or annual sources. The 'all monthly' category includes either volume indicators or indicators derived from monthly turnover series divided by monthly price series. Included here are monthly figures derived from turnover figures provided with value added tax (VAT) returns to Customs and Excise. Of VAT returns, 20 per cent are monthly while the remainder are apportioned to individual months. (The 'monthly' categories exclude any contribution from the new monthly turnover inquiries – see Section 4.)

As chart 1 shows, 38 per cent of the data used in the IoS is based on monthly indicators. Of this, 21 per cent includes monthly deflation; a further 17 per cent uses monthly current price series with a quarterly or annual deflator. Two per cent of series are based on annual data. The greatest proportion of series (60 per cent) is based on quarterly indicators with the monthly path being derived using standard interpolation techniques. Some quarterly data may be based on annual source data, interpolated by the supplier.

Chart 1
Periodicity of IoS data



Part of the IoS development programme has been to convert quarterly turnover series to monthly collection. When these are fully incorporated into the monthly IoS approximately 50 per cent of it will be based on monthly indicators.

Industry detail for publication

The experimental monthly IoS will initially be published as a headline figure for all of services, plus five component series:

Description	*Definition*
Distribution	SIC92 Divisions 50-52
Hotels and restaurants	SIC92 Division 55
Transport, storage and communication	SIC92 Divisions 60-64
Business services and finance	SIC92 Divisions 65-74
Government and other services	SIC92 Divisions 75-95

The categories correspond to the industry classifications for services used in the published estimates of GDP(O). The decision to publish at this level of detail is dictated by the proportion of monthly data available. 'Distribution' and 'hotels and restaurants' are shown separately because they include high proportions of monthly data. Since December 1999 a prototype Index of Distribution (IoD) has been published. Now that the experimental monthly IoS has been introduced, the headline IoD will be included within the monthly release for the experimental IoS. The IoD release currently shows values for lower level industry components; these will not be shown in the experimental monthly IoS release but will continue to be available on request. More detailed components of the other IoS series will be made available as more monthly data are incorporated and the quality of monthly series improves.

Chart 2 shows, for each of the industry categories, the percentage based on monthly indicators. For instance 'distribution' contains 98 per cent monthly indicator data. 'Hotels and restaurants' contains 95 per cent monthly indicator data, most based on VAT turnover. By contrast, the 'government and other services' series include seven per cent monthly data.

Chart 2
Proportion of monthly data in published services series

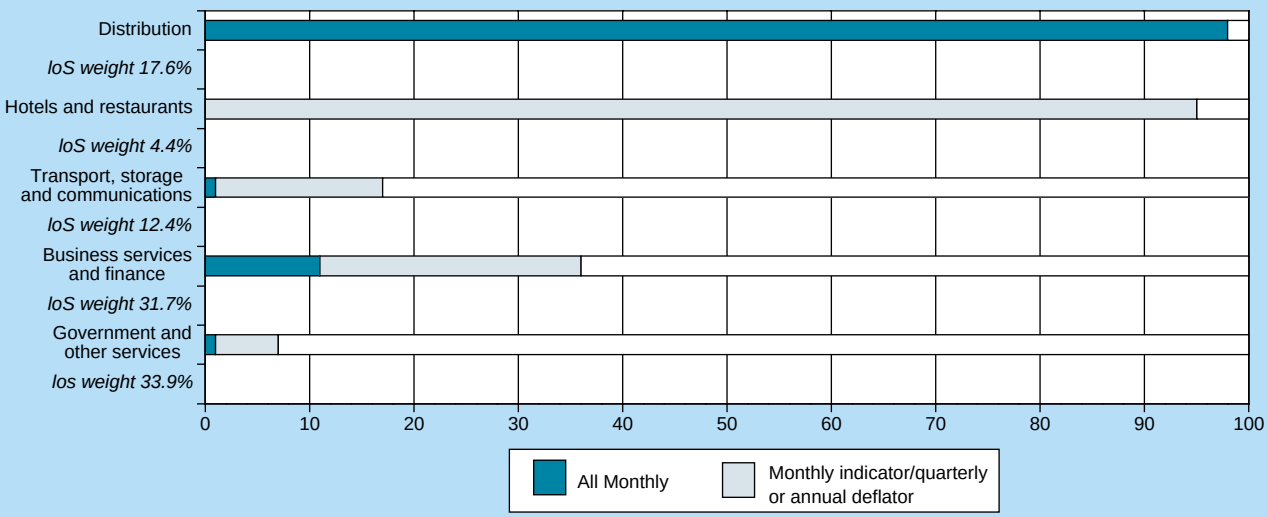


Table 1 shows the proportion of monthly data at the 2-digit divisional level. The long-term aim is to publish IoS at this level of detail, but at present about half of these categories have no monthly data.

Present IoS and GDP(O) services' indicators.
Changes in the output of the service industries are estimated through a wide range of indicators. Chart 3 shows the main types of indicator used now. About 28 per cent of total service industry estimates are based on turnover indicators, using either inquiry data or aggregate turnover data from VAT returns.

Services are provided by a mixture of the public and private sectors – the private sector accounts for about three-quarters of total services. Chart 4 gives the same information as Chart 3, but just for private sector services, and shows that 35 per cent of private sector service industry estimates are based on turnover indicators.

Table 1 Periodicity of IoS data - by industry divisions

	IoS weight (%)	Monthly* (%)	Quarterly (or annual) indicator (%)
Motor trades	3.0	100	0
Wholesale trade	6.4	96	4
Retail trade	7.2	100	0
Hotels and restaurants	4.1	95	5
Land transport	3.6	54	46
Water transport	0.4	0	100
Air transport	0.9	0	100
Auxiliary transport	2.7	5	95
Post and telecomm.	4.1	0	100
Financial intermediation	6.0	63	37
Insurance and pensions	2.7	0	100
Financial auxiliaries	0.9	26	74
Real estate activities	2.8	59	41
Renting of machinery	1.2	0	100
Computer services	1.8	100	0
R & D	0.6	0	100
Other business	9.3	58	42
Public administration	8.8	0	100
Letting of dwellings	10.2	0	100
Education	7.9	0	100
Health and social work	9.2	0	100
Sewage and refuse	0.8	0	100
Membership orgs.	0.8	0	100
Recreational activities	3.2	63	37
Other services	0.7	52	48
Private households	0.7	0	100

* Includes monthly indicator with quarterly or annual deflator.

The contents of the general categories in charts 3 and 4 are:

Other current price indicators includes: some IoP components; retail sales; railway freight; international passenger revenue; bank and non-bank loans and deposits; building society liabilities; insurance net premium income; government rent subsidies; forces' pay.

Volume indicators includes: car registrations; fuel deliveries; rail passenger and freight transported; air passenger and freight miles; shipping volumes; Post Office series; bank credit and debit clearings, building society advances; property and land transfers; public sector output indicators for: social security, administration of justice, education and health.

This wide variety of indicators reflects the diversity of the service industries themselves. Part of the IoS work programme will be to review the data sources used.

Employment is still in wide use in the IoS and GDP(O): the majority of service industries using employment indicators lie within the public sector where the measurement of output is often difficult. The different mix of indicators used for private sector services and for public sector services is shown in chart 5.

Section 4 - Future plans

Future developments will increase the proportion of monthly data and review and improve the indicators used.

The IoS development program looks at improving both the range and quality of output indicators; key examples being turnover data and price indices. Other aims are to improve the methods used and to improve the IoS' timeliness. This section also explains the criteria for dropping the 'experimental' label from the IoS component series.

Indicator developments include:

- further improvements to the services short-period turnover inquiries;
- using survey data for more industries;
- using new monthly turnover survey results;
- are more monthly data out there?
- use of monthly indicators alongside existing quarterly/annual series; and
- improving monthly paths through a review of interpolation.

Price series developments include:

- improving the range and quality of services' output prices; and
- mixing CSPIs and RPI components as appropriate.

Chart 3

Types of indicator used for all service industries: proportions by value-added weight

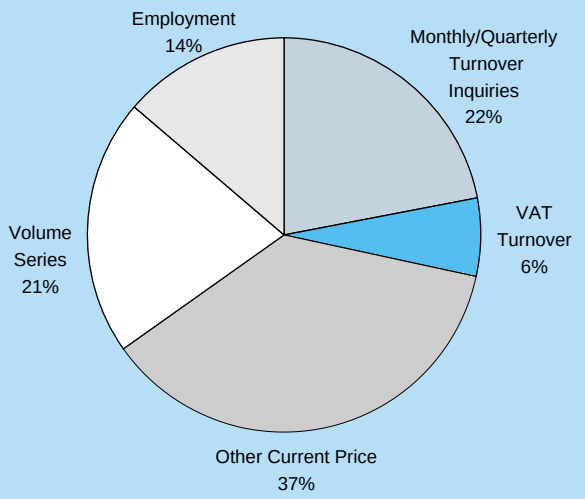
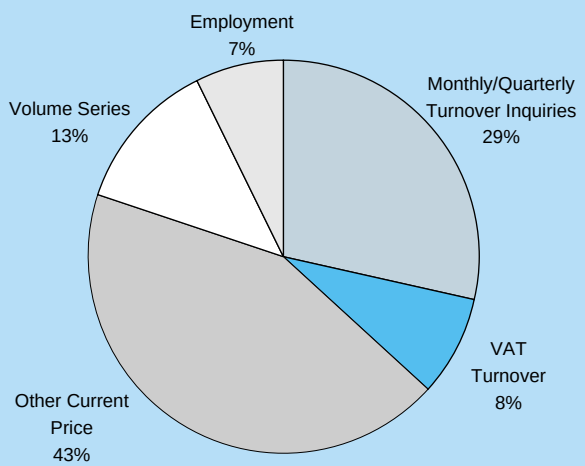


Chart 4

Types of indicator used for private sector service industries: proportions by value-added weight



Methods developments include:

- estimating changes in inventories;
- improving public sector indicators;
- implications of the Short-Term Output Indicators Review; and
- co-ordinating data and methodology improvements.

The timeliness strategy includes:

- using the National Statistics web-site; and
- speeding up IoS processes.

Indicator developments:

Further improvements to the services short-period turnover inquiries

- Evaluation of a 'matched-pairs' survey estimation method to assess whether reductions in volatility outweigh any possible additional bias and whether such bias can be dealt with.
- Re-evaluating the allocation of survey forms to industry and size bands, to ensure that the sample design is still up-to-date and minimises sampling errors.

Using services survey data for more industries

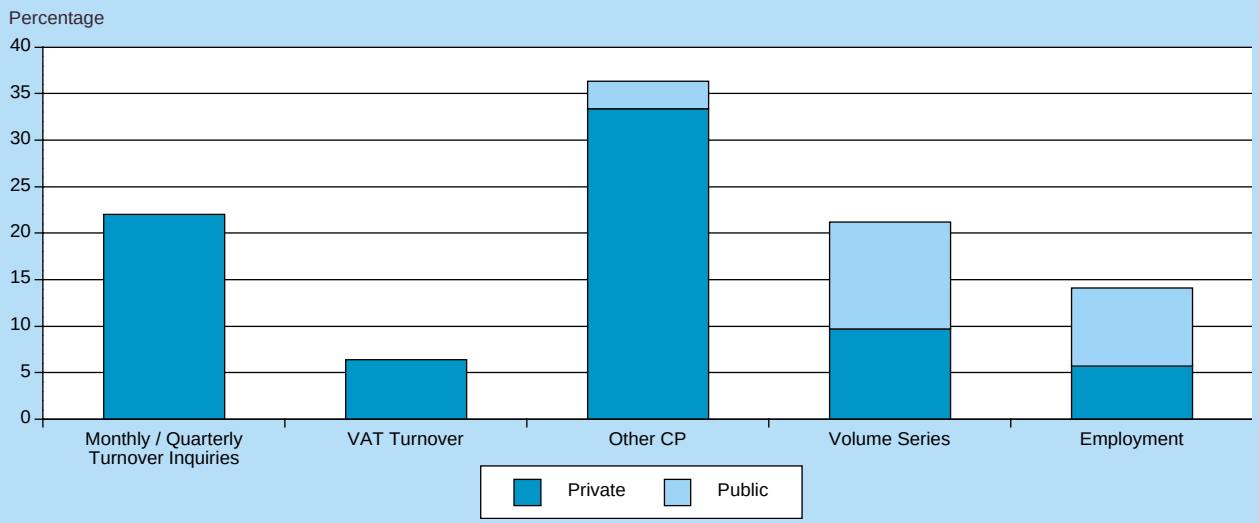
Improvements to turnover surveys should allow fuller use of these data (two thirds of individual returns currently feed directly into the IoS). Any resulting revisions will be handled through the national accounts revisions policy.

Using new monthly turnover survey results

Initially the experimental monthly IoS will use current GDP(O)[2] indicator series. Nearly all of the IoD[8] is based on monthly indicators.

Chart 5

Types of Indicator used in service industries: proportion by public and private sector and by services value-added weight



Elsewhere amongst the service industries the identification of suitable monthly indicators will often take more research and new or improved collections. Where quarterly services turnover inquiries are being converted to monthly collection, this will raise the proportion of monthly indicator sources in the experimental monthly IoS from 38 per cent to about 50 per cent. Table 2 shows how these will be distributed among service industry categories.

Many quarterly turnover sources were converted to monthly in April 2000. For earlier periods, a monthly path will be interpolated through the quarterly data. From April 2000 onward, the monthly path will be based on actual monthly data. At least two to three years' monthly data will be required to allow seasonal adjustment. Consequently until at least 2002 or 2003 new monthly series will be aggregated to quarters and have a monthly path interpolated. Once reliable monthly seasonal adjustment is possible the back series will be revised to reflect the seasonally adjusted monthly data (as ONS revisions practices allow).

Are more monthly data out there?
A number of indicators in the IoS/GDP(O) are provided by non-ONS data suppliers (e.g. other government departments). We will explore whether they can provide monthly data.

Use of monthly indicators alongside existing quarterly/annual series
In some industries it may not be possible to identify monthly indicators which are as conceptually sound as the existing quarterly/annual indicators. However, in these cases, it may be useful to benchmark monthly indicators to a conceptually superior quarterly/annual measure. We will investigate whether this is better than interpolation and forecasting of quarterly/annual data, e.g. for government services.

Improving monthly paths through a review of interpolation
Over sixty per cent of the experimental monthly IoS data is based on quarterly or annual data sources. Here quarterly data has to be interpolated to produce a monthly path. It is also necessary to forecast the latest month(s). When new quarterly data arrives it can result in revisions to interpolated monthly data. So, in addition to collecting more monthly data, the ONS is undertaking a review of its interpolation techniques.

Price developments:
Improving the range and quality of services output prices
Given the weakness of some of the available price data for service industries, the development of the data and methodology used in deflation is an important part of the overall IoS work programme.

A July 2000 *Economic Trends* article[11] spelt out the progress being made in developing Corporate Services Price Indices (CSPIs), which measure the prices of services purchased by business (including government) . The article spelt out plans for development of 23 additional indices over the next two years. These include some of the industries in which the collection of consistent data on prices is most difficult, such as engineering consultancy and computer services. A quality assurance programme for existing CSPIs is due to be completed by the end of 2002 when the CSPI contributor base will widen through an overall doubling of the sample size.

At present the IoS and GDP(O) use eight established CSPIs. The many anticipated improvements in CSPIs indicate increasing scope to make more use of them in the IoS and GDP(O). They will replace less appropriate price indices or enable us to replace volume indicators with deflated turnover indicators.

There are no existing plans to start producing monthly CSPIs and monthly paths for CSPIs are generated through forecasting and interpolation. Given the current stability in CSPIs, the ONS priority is to extend the range of CSPIs rather than to shorten their periodicity.

Mixing CSPIs and RPI components, as appropriate
Ideally, for any service, that part of output sold to businesses should be deflated by an output price index which measures the prices charged to businesses – CSPIs are appropriate for this. That part of output sold to households should, however, be deflated using a consumer price index (adjusted for the effects of some sales taxes) – components of the Retail Prices Index are appropriate for this purpose.

Many services (e.g. telecommunication services, rail passenger transport services) are sold to both businesses and households. In these circumstances both output and consumer price indices should be used, combined according to the percentage of the service output

Table 2 Proportion of monthly indicator sources in the experimental monthly IoS

	Distribution	Hotels & restaurants	Transport, storage & communication	Business services & finance*	Government & other services
Now	98%	95%	17%	36%	7%
With additional monthly turnover data	100%	100%	49%	51%	10%

Note * The proportion of monthly data is before applying the adjustment for financial services.

going to the business or household sectors. The reviews of methods will include an evaluation of whether an improved range of price indices can be used, as an increased number of CSPIs become available.

Methodology developments:

Estimating changes in inventories

Ideally changes in inventories should be taken into account in calculating gross value added. Inventories consist of:

- Work-in-progress;
- Inventories of finished goods of companies' own production;
- Inventories of goods purchased for resale; and
- Inventories of materials and supplies.

It is appropriate to make an adjustment for changes in work-in-progress and 'inventories of finished goods of companies' own production' if these are significant. (This is the approach adopted in the Index of Production, for the production industries.) There is, however, currently no adjustment for changes in inventories in the monthly IoS or the services part of quarterly GDP(O). It is planned to assess whether adjusting industries for changes in work-in-progress would bring worthwhile improvements in services short-term output indicators.

In the hotels and restaurants and distribution sectors, data on total inventories are collected. In the ONS' 1999 Annual Business Inquiry (ABI), contributors were, for the first time, asked to provide a separate value for work-in-progress. In the rest of the service industries, work-in-progress is considered to be the only significant part of inventories (e.g. accountants can not hold inventories of finished cases, but they can have work-in-progress) and is to be covered in ONS surveys. In previous years only a subset of service industries were asked about work-in-progress, and there was concern that significant inventories were being missed. The results from the 1999 Annual Business Inquiry which is collecting data on work-in-progress from all service industries, will be due in 2001.

Established quarterly data exist on total inventories for the distribution industries. In the first quarter of 2000 quarterly collection of data on total inventories also began for hotels and restaurants and those parts of other business activities in which work-in-progress is likely to be significant.

Improving public sector indicators

Here the use of employment indicators has been reduced in recent years by the introduction of a number of direct indicators of output volumes. Work continues in this area[12] and will help improve the indicator quality for the IoS as well as the wider national accounts.

Implications for the IoS of the Short-Term Output Indicators Review

The first of the National Statistics quality reviews was into the ONS's short-term output indicators[10]. The review looked into the compilation of the indicators for use in short term macro-economic analysis and assessment, i.e. mainly their contribution to the estimation of GDP. The review covered the IoP, the experimental monthly IoS and (GDP(O)).

The report showed that the indicators are of good quality and are fit for purpose (mainly in the context of the compilation of GDP). It identified the key strengths of the ONS short-term output indicators and made a number of valuable recommendations for improving quality and the way the ONS compiles the indicators. Some of these recommendations will affect the future development of the monthly IoS:

- 'The ONS should assess the feasibility of producing monthly estimates of GDP'. *This would mean reviewing the relationship between the IoS, IoP and GDP(O), and putting in place consistent operating systems and working practices.*
- 'That an harmonised economy-wide design across the short-period inquiries should be sought'. *This would mean harmonising and improving the design and methods for the monthly turnover surveys for the service industries and the production industries. It may mean rebalancing sample sizes between industries.*
- 'A joint program should be agreed ... for incorporating new (turnover and price) data into the GDP(O)/IoS'. *This should help ensure best use is made of new service data sources as they become available.*

Co-ordinating data and methodology improvements

It is planned that methods and data sources will be reviewed industry-by-industry jointly between the IoS and GDP(O). This process is expected to continue into 2002 and possibly beyond. Implementation of the outcomes will lead to revisions, handled in line with the national accounts revisions policy.

Improving timeliness:

The Index of distribution (IoD) has been published monthly since December 1999 and is available about 15 weeks after the end of the month to which it relates. The IoS will be released with the same timeliness. (The long established IoP is released about $5^1/_2$ weeks after the end of the month.) There are two ways in which components of the IoS can be speeded up in the short-term :

- Current release of the IoD is via an article in *Economic Trends*. Release of the data through a new 'experimental statistics' section of the National Statistics web-site will cut about two weeks out of the release delay.

- Improvements to the operational procedures within the IoS teams will allow earlier publication. Given the experience with the IoD, it will be possible to catch up by a month for the distribution industries for May 2001. Speeding up the remaining industries within services will take longer.

These two improvements will reduce the delay in release of distribution indices from 15 to 9 weeks. Further improvements in timeliness will require survey results and other indicator information to be produced more quickly. It is currently too early to assess what will be feasible, although users have requested that ultimately the IoS has the same timeliness as the IoP.

Dropping the 'experimental' label

Publication of the experimental monthly IoS at this early stage enables us to explain progress to date, plans for the future, and to seek feedback from users. It also encourages us to ensure that robust computer systems and procedures are in place. At this stage users should take care in the interpretation or analysis of the data. The series will be re-categorised as mainstream statistics when the following criteria are met:

- series are based on a higher proportion of monthly data;
- results have been quality assured; and
- data are fit for purpose.

The next key milestone within the IoS development project will be the launch of the distribution component of the IoS as a mainstream statistic. The distribution component is already based on a high proportion of monthly data and it is expected that the other criteria will be met by May 2001. As the quality of other components improves their timeliness will be improved and as each component meets all the criteria it will become a mainstream statistic.

Relationship with GDP(O)

At present the monthly data of the experimental monthly IoS and its component series are made to be consistent with the equivalent quarterly series within GDP. As the quality of the IoS monthly components improves so they will replace detailed quarterly GDP(O) indicators. Aggregate quarterly GDP(O) and its industrial breakdown will continue to be published as now, but will be built up from largely monthly sources rather than, as now, largely quarterly ones. The monthly IoS will then no longer need to be benchmarked to GDP(O) but will rather help to set its value directly. As a national accounts component, the IoS will continue to take national accounts balancing adjustments as GDP(O) does now and to follow national accounts revisions policy[3].

The timing and nature of the change from GDP(O) leading (with the IoS benchmarked to it) and the IoS leading (with GDP(O) equal to the average of its months) is likely to vary by industry depending on the quality and extent of the monthly data available. The incorporation of monthly services data into GDP(O), which already includes monthly data for manufacturing industries, is a significant necessary step if the ONS is to publish a monthly estimate of GDP.

Section 5 - Conclusion

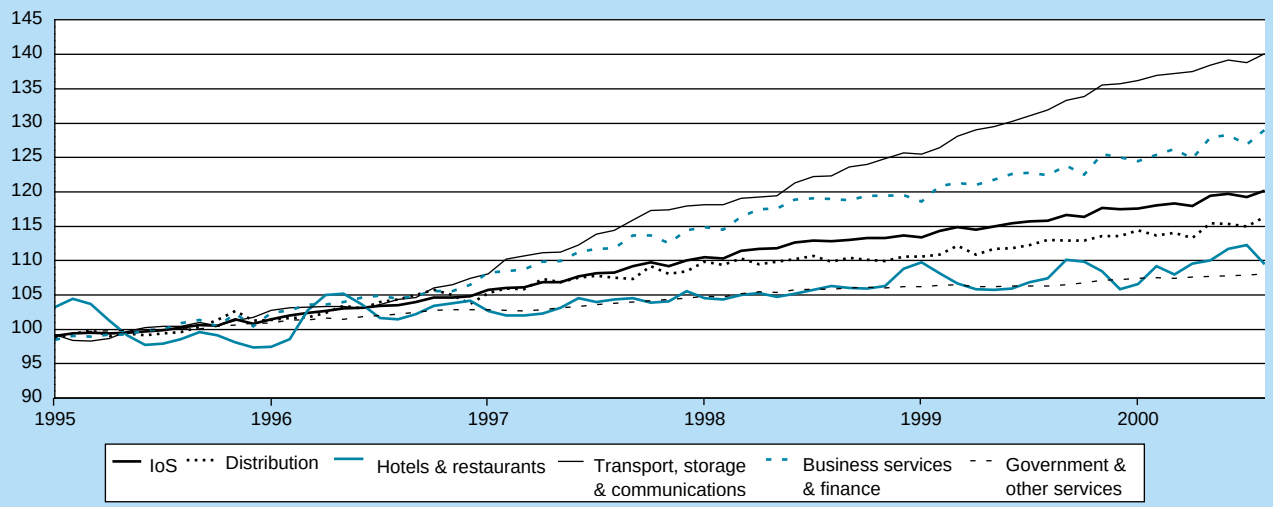
This article is held on the National Statistics web-site (http://www.statistics.gov.uk) within the Economy Theme. It can be found at http://www.statistics.gov.uk/nsbase/themes/economy/Articles/ShortTermIndicators/ReportsServices.asp

The article has explained the conceptual basis of the experimental monthly IoS, and how it relates to the IoP to GDP(O) and to the national accounts. The data in the IoS have been explained and attention has

***Chart* 6**

Experimental Index of services and showing industry breakdown

(Seasonally adjusted: 1995 = 100)



been drawn to the lack of monthly data: the implications for interpolation, seasonal adjustment and revisions have been spelt out.

The future IoS work programme includes increasing the range of monthly indicators, with a focus on an increased use of turnover and price information. Planned improvements to methodology have been explained, as have steps to improve timeliness. We have explained how the interaction between GDP(O) and the IoS will change, and have set out the criteria to decide when to drop the 'experimental' label from components of the IoS.

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

Section 6 - Monthly IoS' results (August 2000)

IoS data from January 1995 to August 2000 for the IoS and its five sub-indices is shown graphically in chart 6 and in tables at the end of the article.

The experimental IoS will now be released on a monthly basis. The monthly results will be placed within the 'experimental statistics' area of the National Statistics web-site. The link to 'experimental statistics' can be found in the 'latest figures' area. The direct address for 'experimental statistics' is http:/www.statistics.gov.uk/press_release/Experimental.asp

A monthly update of the results for the experimental IoS will be available on the National Statistics web-site at 10 am on the day of release (the area lists the dates of forthcoming releases). The results will also be published in *Economic Trends* for the first few months.

The monthly figures for the experimental IoS will be consistent with the corresponding quarterly series for the same industries in the quarterly estimates of GDP(O). The estimates of IoS that follow are consistent with the 0.7 per cent third quarter services growth in GDP(O) published on 20 October. There has been a full update of the monthly path of the IoD as part of the work for the introduction of the IoS.

From May 2001 the experimental monthly IoS will be consistent with the latest published estimate of GDP(O).

The experimental IoS shows the monthly movements in volume terms of gross value added in the services sector. It covers all services, including government services. Index numbers are based on 1995=100 and all values are seasonally adjusted.

Index of services 1995=100

In August, the experimental monthly Index of Services (IoS) showed the service industries' gross value added rising by 1.0 per cent in the latest three months, compared with the previous three months see (charts 7 and 8) and by 3.5 per cent in the latest 3 months compared with the same three months a year ago.

Chart **7**

IoS: 3 month or previous 3 month percentage changes

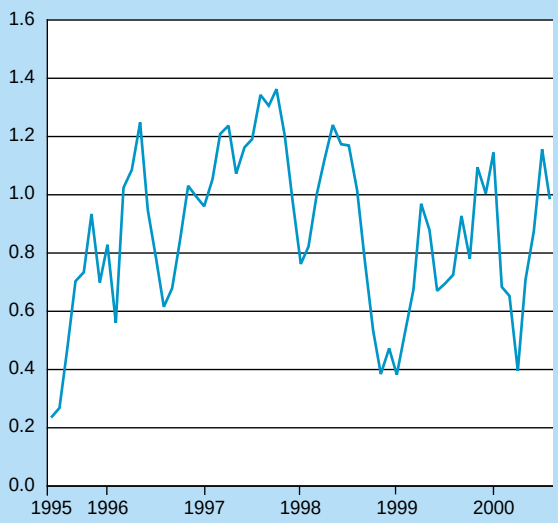
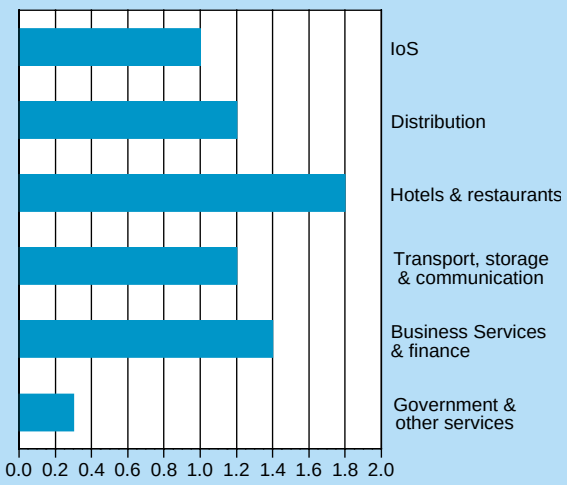


Chart **8**

IoS showing industry breakdown: latest 3 months-on-previous 3 months, percentage changes

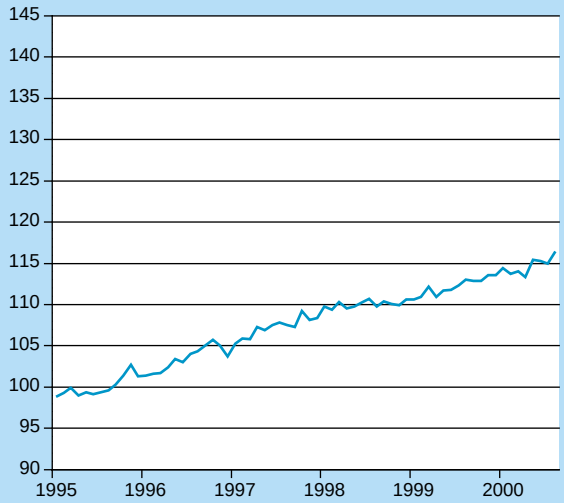


Distribution (SIC 92 Divisions 50-52)

In August, the experimental monthly index of gross value added for the distribution sector rose by 1.2 per cent in the latest three months compared with the previous three months, and by 2.9 per cent in the latest three months compared with the same three months a year ago.

Chart **9**

Experimental index for Distribution
(seasonally adjusted: 1995 = 100)
(Weights: IoS 17.6%, GVA 11.7%)

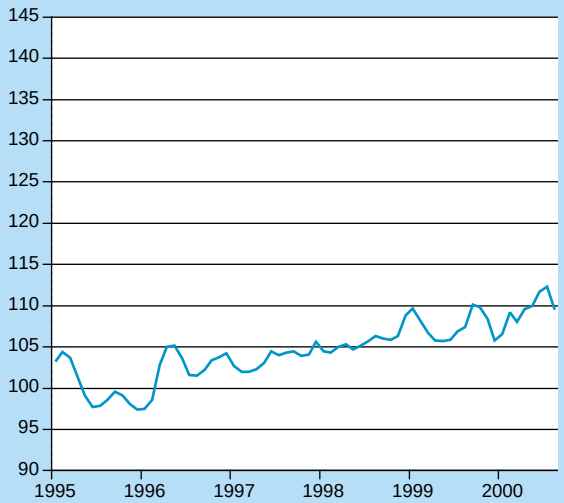


Hotels and restaurants (SIC 92 Division 55)

In August, the experimental monthly index of gross value added for hotels and restaurants increased by 1.8 per cent in the latest three months compared with the previous three months, and by 4.1 per cent in the latest three months compared with the same three months a year ago.

Chart **10**

Experimental index for Hotels and restaurants *(seasonally adjusted: 1995 =100)*
(Weights: IoS 4.4% , GVA 2.9%)

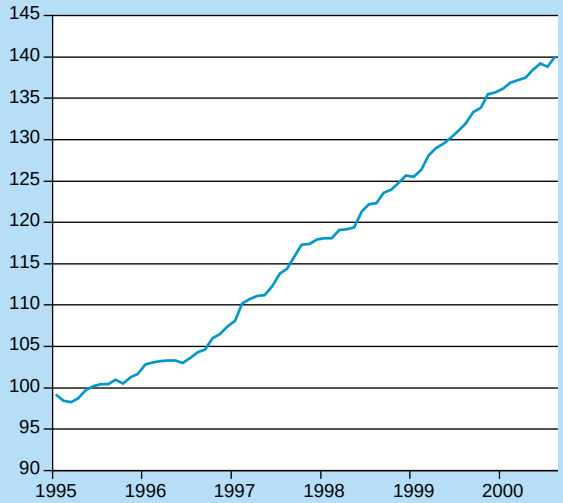


Transport, storage and communication (SIC 92 Divisions 60-64).

In August, the experimental monthly index of gross value added for transport, storage and communication increased by 1.2 per cent in the latest three months compared with the previous three months, and by 6.3 per cent in the latest three months compared with the same three months a year ago.

Chart **11**

Experimental index for Transport, storage and communication
(seasonally adjusted: 1995 = 100)
(Weights: IoS 12.4% , GVA 8.3%)



Business services and finance (SIC92 Divisions 65-74)

In August, the experimental monthly index of gross value added for business services and finance increased by 1.4 per cent in the latest three months compared with the previous three months, and by 4.5 per cent in the latest three months compared with the same three months a year ago.

Government and other services (SIC92 Divisions 75-95)

In August, the experimental monthly index of gross value added for government and other services increased by 0.3 per cent in the latest three months compared with the previous three months, and by 1.5 per cent in the latest three months compared with the same three months a year ago.

Chart 12

Experimental index for Business services and finance

(seasonally adjusted: 1995 = 100)
(Weights: IoS 31.7% , GVA 21.1%)

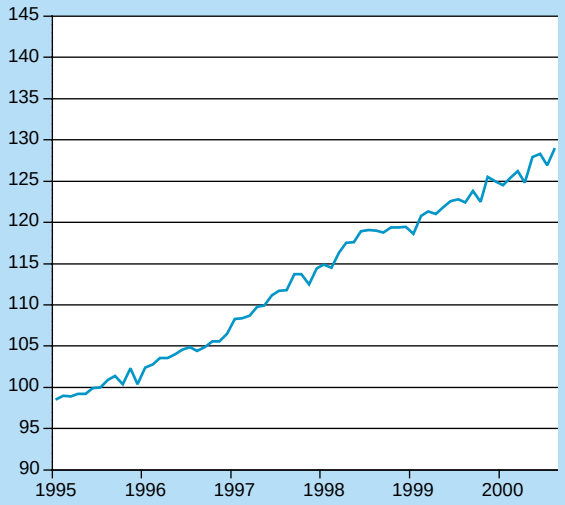
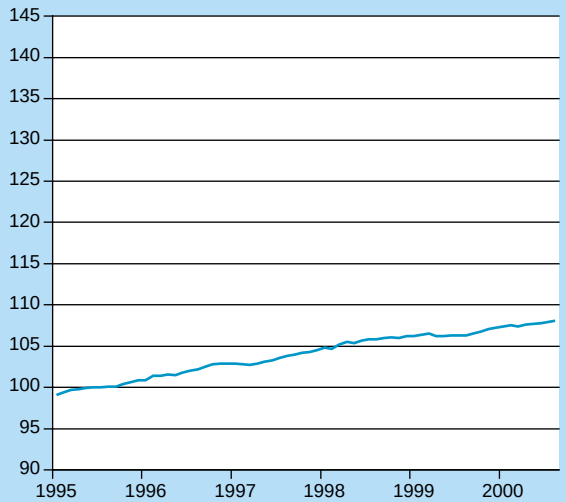


Chart 13

Experimental index for Government and other services

(seasonally adjusted: 1995 = 100)
(Weights: IoS 33.9% , GVA 22.5%)



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IOS Index of Services (EXPERIMENTAL)

Index numbers of service industries' gross value added at constant basic prices [1,2,3]

1995=100, seasonally adjusted

	.				Industry groups							
	Total service industries [4]				**Distribution: wholesale and retail trade; repairs [4]**				**Hotels and restaurants [4]**			
		percentage change				*percentage change*				*percentage change*		
	Index	*month on month*	*latest 3 months on previous 3 months*	*latest 3 months on same 3 months a year ago*	Index	*month on month*	*latest 3 months on previous 3 months*	*latest 3 months on same 3 months a year ago*	Index	*month on month*	*latest 3 months on previous 3 months*	*latest 3 months on same 3 months a year ago*
1995 weights	*1000*				*176*				*44*			
	FVQQ	FVGC	FVGD	FVGE	FVVR	FVVK	FVVL	FVVM	FVXT	FVXA	FVXB	FVXC
1995 Jan	99.0	..	..	..	98.8†	..	..	..	103.2	..	..	..
Feb	99.4	0.4	..	..	99.3	*0.5*†	..	..	104.4	1.2	..	..
Mar	99.5	0.1	..	..	99.9	*0.6*	..	..	103.7	–0.7	..	..
Apr	99.4	–0.1	..	..	99.0	*–1.0*	..	..	101.3	–2.4	..	..
May	99.5	0.1	..	..	99.4	*0.4*	..	..	99.1	–2.1	..	..
Jun	99.7	0.2	0.2	..	99.1	*–0.3*	*–0.2*	..	97.7	–1.4	–4.3	..
Jul	99.9	0.2	0.3	..	99.4	*0.4*	*–0.1*†	..	97.9	0.2	–4.8	..
Aug	100.2	0.3	0.5	..	99.6	*0.2*	*–0.1*	..	98.6	0.7	–3.3	..
Sep	100.6	0.4	0.7	..	100.3	*0.7*	*0.6*	..	99.6	1.0	–0.7	..
Oct	100.5	–0.1	0.7	..	101.4	*1.1*	*1.1*	..	99.1	–0.5	0.8	..
Nov	101.5	1.0	0.9	..	102.7	*1.3*	*2.1*	..	98.1	–1.0	0.9	..
Dec	100.8	–0.7	0.7	..	101.3	*–1.4*	*2.0*	..	97.4	–0.7	–0.5	..
1996 Jan	101.5	0.7	0.8	..	101.4	*0.1*	*1.4*	..	97.5	0.1	–1.4	..
Feb	102.0	0.5	0.6	..	101.6	*0.2*	–	..	98.6	1.1	–1.1	..
Mar	102.4	0.4	1.0	2.7	101.7	*0.2*	*–0.2*	*2.2*	102.8	4.3	1.5	–4.0
Apr	102.7	0.3	1.1	3.0	102.4	*0.6*	*0.1*	*2.5*	105.0	2.1	4.6	–1.0
May	103.0	0.3	1.2	3.3	103.4	*1.0*	*1.1*	*3.1*	105.2	0.2	6.6	2.9
Jun	103.1	0.1	0.9	3.4	103.0	*–0.4*	*1.3*	*3.8*	103.6	–1.5	5.0	5.3
Jul	103.4	0.3	0.8	3.5	104.0	*1.0*	*1.5*	*4.2*	101.6	–1.9	1.3	5.3
Aug	103.5	0.1	0.6	3.4	104.3	*0.2*	*1.2*	*4.4*	101.5	–0.1	–2.0	4.3
Sep	104.0	0.5	0.7	3.4	105.0	*0.7*	*1.5*	*4.7*	102.2	0.7	–2.7	3.1
Oct	104.6	0.6	0.8	3.6	105.7	*0.6*	*1.5*	*4.6*†	103.4	1.2	–1.1	3.3
Nov	104.6	–	1.0	3.5	105.0	*–0.6*	*1.5*	*3.8*	103.8	0.4	0.8	4.3
Dec	104.8	0.2	1.0	3.7	103.7	*–1.3*	*0.4*	*3.0*	104.2	0.4	2.0	5.7
1997 Jan	105.7	0.9	1.0	3.7	105.3	*1.6*	*–0.3*	*2.9*	102.7	–1.5	1.2	6.0
Feb	106.0	0.3	1.1	4.0	105.9	*0.6*	*–0.3*	*3.5*	102.0	–0.7	–0.2	5.2
Mar	106.1	0.1	1.2	3.9	105.8	*–0.1*	*0.9*	*4.1*	102.0	–	–1.5	2.6
Apr	106.9	0.8	1.2	3.9	107.3	*1.4*	*1.6*	*4.4*	102.3	0.3	–1.4	–
May	106.9	–	1.1	3.8	106.9	*–0.4*	*1.6*	*4.1*	103.1	0.8	–0.5	–1.8
Jun	107.7	0.7	1.2	4.1	107.5	*0.5*	*1.5*	*4.2*	104.5	1.4	1.1	–1.2
Jul	108.2	0.5	1.2	4.3	107.8	*0.3*	*1.0*	*3.8*	104.0	–0.5	1.7	0.4
Aug	108.3	0.1	1.3	4.6	107.5	*–0.3*	*0.8*	*3.7*	104.3	0.3	1.7	2.0
Sep	109.2	0.8	1.3	4.8	107.3	*–0.2*	*0.3*	*3.0*	104.5	0.2	0.9	2.4
Oct	109.7	0.5	1.4	4.8	109.2	*1.7*	*0.5*	*2.9*	103.9	–0.5	0.3	1.8
Nov	109.2	–0.5	1.2	4.8	108.1	*–0.9*	*0.6*	*2.8*	104.1	0.2	–0.1	1.0
Dec	110.0	0.7	1.0	4.7	108.4	*0.3*	*1.0*	*3.6*	105.6	1.4	0.3	0.7
1998 Jan	110.5	0.5	0.8	4.6	109.8	*1.3*	*0.8*	*3.9*	104.5	–1.0	0.5	1.1
Feb	110.3	–0.2	0.8	4.5	109.4	*–0.4*	*1.0*	*4.1*	104.3	–0.2	0.6	1.8
Mar	111.4	1.0	1.0	4.5	110.3	*0.8*	*1.2*	*3.9*	105.0	0.6	0.1	2.3
Apr	111.7	0.3	1.1	4.5	109.5	*–0.7*	*0.9*	*3.2*	105.3	0.3	0.1	2.7
May	111.8	0.1	1.2	4.7	109.8	*0.3*	*0.6*	*3.0*	104.7	–0.6	0.2	2.4
Jun	112.6	0.7	1.2	4.5	110.2	*0.3*	–	*2.4*	105.2	0.5	0.4	1.7
Jul	112.9	0.3	1.2	4.5	110.7	*0.5*	*0.5*	*2.7*	105.7	0.5	0.3	1.3
Aug	112.8	–0.1	1.0	4.3	109.8	*–0.8*	*0.3*	*2.5*	106.3	0.6	0.7	1.4
Sep	113.0	0.2	0.8	4.0	110.4	*0.5*	*0.4*	*2.6*	106.0	–0.3	0.9	1.7
Oct	113.3	0.3	0.5	3.6	110.1	*–0.2*	*–0.1*	*2.0*	105.9	–0.1	0.9	1.8
Nov	113.3	–	0.4	3.5	109.9	*–0.3*	*–0.1*	*1.8*	106.3	0.3	0.3	1.8
Dec	113.7	0.4	0.5	3.5	110.6	*0.7*	*–0.1*	*1.5*	108.8	2.4	0.9	2.3

1 Indices are valued at constant basic prices, which exclude taxes and subsidies on products.
2 Estimates cannot be regarded as accurate to the last digit shown.
3 Any apparent inconsistencies between the index numbers and the percentage changes shown in these tables are due to rounding.
4 The equivalent quarterly index series are released electronically as part of the GDP(O) estimates. For further information about obtaining these series please telephone 020 7533 5675, fax 020 7533 5688 or email on-line.services.branch@ons.gov.uk

Sources: For further information on these data please;
telephone 01633 812624;
fax 01633 819043;
or email ios.enquiries@ons.gov.uk

IOS Index of Services (EXPERIMENTAL)

Index numbers of service industries' gross value added at constant basic prices [1,2,3]

continued

1995=100, seasonally adjusted

	.				Industry groups							
	Total service industries [4]				**Distribution: wholesale and retail trade; repairs [4]**				**Hotels and restaurants [4]**			
		percentage change				*percentage change*				*percentage change*		
	Index	*month on month*	*latest 3 months on previous 3 months*	*latest 3 months on same 3 months a year ago*	Index	*month on month*	*latest 3 months on previous 3 months*	*latest 3 months on same 3 months a year ago*	Index	*month on month*	*latest 3 months on previous 3 months*	*latest 3 months on same 3 months a year ago*
1995 weights	*1000*				*176*				*44*			
	FVQQ	FVGC	FVGD	FVGE	FVVR	FVVK	FVVL	FVVM	FVXT	FVXA	FVXB	FVXC
1999 Jan	113.4	–0.3	0.4	3.2	110.6	*–0.1*	*0.2*	*1.4*	109.7	0.9	2.0	3.4
Feb	114.3	0.8	0.5	3.2	110.9	*0.3*	*0.5*	*1.3*	108.2	–1.4	2.7	3.9
Mar	114.9	0.5	0.7	3.1	112.2	*1.2*	*0.9*	*1.2*	106.7	–1.4	1.1	3.4
Apr	114.5	–0.3	1.0	3.1	110.9	*–1.2*	*0.9*	*1.4*	105.8	–0.8	–1.3	1.9
May	115.0	0.4	0.9	2.8	111.7	*0.7*	*0.8*	*1.6*	105.7	–0.1	–2.6	1.0
Jun	115.4	0.3	0.7	2.6	111.8	*0.1*	*0.2*	*1.5*	105.9	0.2	–2.2	0.7
Jul	115.7	0.3	0.7	2.6	112.3	*0.4*	*0.5*	*1.5*	106.9	0.9	–0.7	0.9
Aug	115.8	0.1	0.7	2.5	113.0	*0.6*	*0.7*	*1.9*	107.4	0.5	0.6	0.9
Sep	116.6	0.7	0.9	2.8	112.9	*–0.1*	*1.1*	*2.2*	110.1	2.5	2.2	2.0
Oct	116.4	–0.2	0.8	2.9	112.9	*0.1*	*0.9*	*2.6*	109.8	–0.3	2.8	2.9
Nov	117.7	1.1	1.1	3.3	113.6	*0.6*	*0.7*	*2.7*	108.4	–1.3	2.6	3.2
Dec	117.5	–0.2	1.0	3.3	113.6	–	*0.6*	*2.9*	105.8	–2.4	–0.1	1.0
2000 Jan	117.6	0.1	1.1	3.6	114.4	*0.7*	*0.8*	*3.2*	106.6	0.8	–2.0	–1.2
Feb	118.0	0.3	0.7	3.4	113.7	*–0.6*	*0.7*	*2.9*	109.2	2.4	–2.1	–1.5
Mar	118.3	0.3	0.7	3.3	114.0	*0.2*	*0.6*	*2.5*	108.0	–1.2	–0.1	–0.2
Apr	117.9	–0.3	0.4	3.1	113.3	*–0.6*	*–0.2*	*2.1*	109.6	1.5	1.8	1.9
May	119.4	1.3	0.7	3.3	115.4	*1.8*	*0.3*	*2.3*	110.0	0.4	1.8	3.0
Jun	119.7	0.3	0.9	3.5	115.3	*–0.1*	*0.5*	*2.8*	111.7	1.5	2.3	4.4
Jul	119.2	–0.4	1.2	3.5	115.0	*–0.2*	*1.4*	*2.9*	112.3	0.6	2.2	4.9
Aug	120.2	0.8	1.0	3.5	116.4	*1.2*	*1.2*	*2.9*	109.5	–2.5	1.8	4.1

For footnotes see page 1 of this Table

Sources: For further information on these data please;
telephone 01633 812624;
fax 01633 819043;
or email ios.enquiries@ons.gov.uk

IOS Index of Services (EXPERIMENTAL)

Index numbers of service industries' gross value added at constant basic prices [1,2,3]

continued

1995=100, seasonally adjusted

	Industry groups											
	Transport, storage and communication [4]				**Business services and finance [4]**				**Government and other services [4]**			
		percentage change				*percentage change*				*percentage change*		
	Index	*month on month*	*latest 3 months on previous 3 months*	*latest 3 months on same 3 months a year ago*	Index	*month on month*	*latest 3 months on previous 3 months*	*latest 3 months on same 3 months a year ago*	Index	*month on month*	*latest 3 months on previous 3 months*	*latest 3 months on same 3 months a year ago*
1995 weights	*124*				*317*				*339*			
	FVYD	FVYE	FVYG	FVYF	FVPA	FVGF	FVGG	FVGH	FVPI	FVGI	FVGJ	FVGK
1995 Jan	99.2	..	..	..	98.5	..	..	..	99.1	..	..	..
Feb	98.4	–0.8	..	..	99.0	0.5	..	..	99.4	0.3	..	..
Mar	98.3	–0.1	..	..	98.9	–0.1	..	..	99.7	0.3	..	..
Apr	98.7	0.4	..	..	99.2	0.3	..	..	99.8	0.1	..	..
May	99.7	0.9	..	..	99.2	–	..	..	99.9	0.1	..	..
Jun	100.2	0.6	0.9	..	99.9	0.7	0.6	..	100.0	0.1	0.5	..
Jul	100.4	0.2	1.7	..	100.0	0.1	0.7	..	100.0	–	0.3	..
Aug	100.4	–	1.5	..	100.9	0.9	1.2	..	100.1	0.1	0.2	..
Sep	101.0	0.6	1.1	..	101.4	0.5	1.3	..	100.1	–	0.2	..
Oct	100.5	–0.5	0.5	..	100.4	–1.0	1.2	..	100.4	0.3	0.2	..
Nov	101.3	0.8	0.6	..	102.3	1.9	1.1	..	100.6	0.2	0.3	..
Dec	101.7	0.4	0.6	..	100.4	–1.9	0.3	..	100.9	0.3	0.6	..
1996 Jan	102.8	1.1	1.3	..	102.4	2.0	0.8	..	100.9	–	0.6	..
Feb	103.1	0.3	1.6	..	102.8	0.4	0.5	..	101.4	0.5	0.7	..
Mar	103.2	0.1	1.8	4.5	103.6	0.8	1.9	4.2	101.4	–	0.6	1.8
Apr	103.3	0.1	1.2	4.8	103.6	–	1.6	4.3	101.6	0.2	0.7	1.8
May	103.3	–	0.7	4.4	104.0	0.4	1.8	4.7	101.5	–0.1	0.4	1.7
Jun	103.0	–0.3	0.1	3.6	104.6	0.6	1.1	4.7	101.8	0.3	0.4	1.7
Jul	103.6	0.6	0.1	3.2	104.9	0.3	1.1	4.8	102.0	0.2	0.3	1.8
Aug	104.3	0.7	0.4	3.2	104.4	–0.5	0.9	4.4	102.2	0.2	0.5	2.0
Sep	104.6	0.3	1.0	3.5	104.9	0.5	0.6	3.9	102.5	0.3	0.6	2.2
Oct	106.0	1.4	1.6	4.3	105.6	0.7	0.4	4.0	102.8	0.3	0.7	2.3
Nov	106.5	0.4	2.0	4.7	105.6	–	0.7	3.9	102.9	0.1	0.7	2.4
Dec	107.4	0.9	2.4	5.4	106.5	0.9	1.1	4.8	102.9	–	0.6	2.2
1997 Jan	108.1†	0.6	2.3	5.3	108.3	1.7	1.7	5.0	102.9	–	0.4	2.1
Feb	110.2	1.9	2.7	5.9	108.4	0.1	2.2	5.8	102.8	–0.1	0.1	1.8
Mar	110.7	0.4	2.8	6.4	108.7	0.3	2.4	5.4	102.7	–0.1	–0.1	1.5
Apr	111.1	0.4	3.1	7.2	109.8	1.0	2.0	5.5	102.9	0.2	–0.1	1.3
May	111.2	0.1	2.2	7.5	109.9	0.1	1.6	5.5	103.1	0.2	–	1.4
Jun	112.3	1.0	1.7	8.1	111.2	1.2	1.7	6.0	103.3	0.2	0.3	1.4
Jul	113.8	1.3	1.6	8.9	111.7	0.4	1.8	6.2	103.6	0.3	0.5	1.5
Aug	114.4	0.5	2.2	9.5	111.8	0.1	1.9	6.6	103.8	0.2	0.6	1.5
Sep	115.9	1.3	2.8	10.1	113.7	1.7	1.9	7.3	104.0	0.2	0.7	1.5
Oct	117.3	1.2	3.0	10.4	113.7	–	1.9	7.7	104.2	0.2	0.6	1.5
Nov	117.4	0.1	3.0	10.6	112.5	–1.1	1.6	7.5	104.3	0.1	0.6	1.4
Dec	117.9	0.4	2.5	10.2	114.4	1.7	1.0	7.2	104.5	0.2	0.5	1.4
1998 Jan	118.1	0.1	1.7	9.8	114.9	0.4	0.8	6.7	104.8	0.3	0.5	1.6
Feb	118.1	–	1.0	8.7	114.5	–0.3	1.1	6.4	104.7	–0.1	0.5	1.7
Mar	119.1	0.8	0.8	8.0	116.4	1.7	1.5	6.3	105.2	0.5	0.5	2.0
Apr	119.2	0.1	0.9	7.4	117.5	0.9	1.9	6.6	105.5	0.3	0.6	2.3
May	119.4	0.2	1.0	7.4	117.6	0.1	2.2	7.0	105.4	–0.1	0.7	2.4
Jun	121.3	1.5	1.3	7.5	118.9	1.1	2.4	7.0	105.7	0.3	0.6	2.4
Jul	122.2	0.8	1.8	7.5	119.1	0.2	2.1	6.9	105.8	0.1	0.5	2.2
Aug	122.3	0.1	2.2	7.4	119.0	–0.1	1.6	6.7	105.8	–	0.4	2.1
Sep	123.6	1.0	2.3	7.0	118.8	–0.2	0.8	5.8	106.0	0.2	0.3	2.0
Oct	124.0	0.3	1.9	6.4	119.4	0.5	0.4	5.3	106.1	0.1	0.3	1.9
Nov	124.8	0.7	1.8	6.2	119.4	–	0.2	5.2	106.0	–0.1	0.3	1.8
Dec	125.7	0.7	1.7	6.2	119.5	0.1	0.4	5.2	106.2	0.2	0.2	1.7

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telephone 01633 812624;
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IOS Index of Services (EXPERIMENTAL)

Index numbers of service industries' gross value added at constant basic prices [1,2,3]

continued

1995=100, seasonally adjusted

	Industry groups											
	Transport, storage and communication [4]				**Business services and finance [4]**				**Government and other services [4]**			
		percentage change				*percentage change*				*percentage change*		
	Index	*month on month*	*latest 3 months on previous 3 months*	*latest 3 months on same 3 months a year ago*	Index	*month on month*	*latest 3 months on previous 3 months*	*latest 3 months on same 3 months a year ago*	Index	*month on month*	*latest 3 months on previous 3 months*	*latest 3 months on same 3 months a year ago*
1995 weights	*124*				*317*				*339*			
	FVYD	FVYE	FVYG	FVYF	FVPA	FVGF	FVGG	FVGH	FVPI	FVGI	FVGJ	FVGK
1999 Jan	125.5	–0.1	1.7	6.4	118.6	–0.8	0.1	4.6	106.2	–	0.2	1.5
Feb	126.4	0.7	1.4	6.6	120.8	1.9	0.4	4.4	106.4	0.2	0.2	1.5
Mar	128.1	1.3	1.5	7.0	121.3	0.4	0.7	4.3	106.5	0.1	0.3	1.4
Apr	129.0	0.7	2.0	7.6	121.0	–0.2	1.6	4.2	106.2	–0.3	0.2	1.2
May	129.5	0.4	2.4	8.1	121.8	0.7	1.4	3.6	106.2	–	–	0.9
Jun	130.2	0.6	2.3	8.0	122.6	0.7	1.3	3.2	106.3	0.1	–0.1	0.7
Jul	131.1	0.6	1.9	7.7	122.8	0.2	1.1	3.3	106.3	–	–0.1	0.6
Aug	131.9	0.7	1.7	7.5	122.4	–0.3	1.0	3.0	106.3	–	–	0.5
Sep	133.3	1.0	1.9	7.7	123.8	1.1	1.0	3.4	106.5	0.2	0.1	0.5
Oct	133.9	0.4	2.1	7.9	122.5	–1.1	0.4	3.2	106.8	0.3	0.3	0.5
Nov	135.5	1.2	2.4	8.1	125.5	2.4	1.1	4.0	107.1	0.3	0.5	0.7
Dec	135.7	0.2	2.2	8.2	125.0	–0.4	1.1	4.1	107.2	0.1	0.6	0.9
2000 Jan	136.2	0.3	2.1	8.3	124.5	–0.4	1.7	4.9	107.4	0.2	0.7	1.0
Feb	136.9	0.6	1.5	8.2	125.4	0.7	0.8	4.5	107.5	0.1	0.5	1.0
Mar	137.2	0.2	1.3	7.9	126.2	0.6	0.8	4.3	107.4	–0.1	0.4	1.0
Apr	137.5	0.2	1.1	7.3	124.8	–1.1	0.4	3.7	107.6	0.2	0.2	1.1
May	138.4	0.7	1.1	6.9	127.9	2.5	1.1	4.1	107.7	0.1	0.2	1.2
Jun	139.2	0.6	1.2	6.8	128.3	0.3	1.3	4.3	107.8	0.1	0.2	1.4
Jul	138.8	–0.3	1.2	6.6	126.9	–1.1	1.8	4.3	107.9	0.1	0.3	1.4
Aug	140.1	1.0	1.2	6.3	129.0	1.7	1.4	4.5	108.1	0.2	0.3	1.5

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