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Revisited Sector Paper on:

ISIC 7310 Advertising

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1 Introduction

Advertising services were first considered by the 8th meeting of the Voorburg Group as part of development proposals for model surveys[1] in Oslo, Norway 1993. Price index measurement was first considered with a series of mini-presentations[2] in the 16th meeting of the Voorburg Group in Örebro, Sweden 2001, followed by a principal paper[3] at the 17th meeting in Nantes, France 2002. The importance of this industry was demonstrated by a second round of mini-presentations[4] at the 19th meeting of the Voorburg Group in Ottawa, Canada 2004, together with a session on Advertising turnover[5]. Advertising SPPIs have also been described[6] in OECD-Eurostat Guide to SPPIs.

In early 2009, in conjunction with the Czech Statistical Office, the Office for National Statistics (ONS) sent out a questionnaire to the statistical offices of 24 countries. The questionnaire contained sections on the development of advertising turnover statistics and on the development of advertising SPPIs. The aim of this paper is to use the results of this questionnaire to supplement previous work on this industry with more recent experiences of national statistical offices and also to incorporate data regarding turnover.

2 Classification

Classification of advertising products and activities generally considers two main streams of outputs: the first is the creative component, planning, designing, creating and placing advertising products; and the second is concerned with the sale of advertising space or time. Since initial consideration by the Voorburg Group, the detailed levels of both industry and product classifications need to contend with not only traditional modes of advertising (print, television, radio etc.) but also the greater emphasis placed on internet advertising, which represents 16% of advertising expenditure in the UK[7], as well as the emergence of other types of campaigns. These growing sectors influence both the creative and the placement activities.

2.1 Industrial classifications

The International Standard Industrial Classification (ISIC Rev 4) considers all Advertising activities as part of one class (Advertising 7310). This class includes:

- creation and realization of advertising campaigns:
  - · creating and placing advertising in newspapers, periodicals, radio, television, the Internet and other media
  - · creating and placing of outdoor advertising, e.g. billboards, panels, bulletins and frames, window dressing, showroom design, car and bus carding etc.
  - · media representation, i.e. sale of time and space for various media soliciting advertising
  - · aerial advertising
  - · distribution or delivery of advertising material or samples
  - · provision of advertising space on billboards etc.
  - · creation of stands and other display structures and sites
- conducting marketing campaigns and other advertising services aimed at attracting and retaining customers:
  - · promotion of products
  - · point-of-sale marketing
  - · direct mail advertising
  - · marketing consulting

[1] Cadin & Trogan (1993)
[2] Buisson (2001), McKenzie (2001), Palmer (2001)
[3] Buisson & Lenseigne (2002)
[4] Auer & Puchter (2004)
[5] Velasco Gimeno, M (2004)
[6] OECD-Eurostat (2005), 4.17
[7] Advertising Statistics Yearbook (2008)

However, this class explicitly *excludes*:

- publishing of advertising material, see 5819
- production of commercial messages for radio, television and film, see 5911
- public-relations activities, see 7020
- market research, see 7320
- graphic design activities, see 7410
- advertising photography, see 7420
- convention and trade show organizers, see 8230
- mailing activities, see 8219

ISIC itself does not make the distinction between creative and sales type activities (other than to explicitly include these activities within the ISIC class). This joint approach is reflected in the Australian and New Zealand Industrial Classification 2006 (ANZSIC 2006).

However other national and regional industrial classifications make the delineation between the media agency type activities, and those activities of a more creative nature.

The Statistical Classification of Economic Activities in the European Community, Rev. 2 (NACE Rev. 2), splits Code 73.1 Advertising into 73.11 Advertising Agencies (the creative component) and 73.12 Media Representation.

Similarly the North American Industrial Classification System 2007 (NAICS 2007) splits these activities into more detail, with the industry group 5418 Advertising, Public Relations, and Related Services split into 54181 Advertising Agencies, 54182 Public Relations Agencies (not considered here), 54183 Media Buying Agencies, 54184 Media Representatives, 54185 Display Advertising, 54186 Direct Mail Advertising, 54187 Advertising Material Distribution Services and 54189 Other Services Related to Advertising.

Note that under the industrial classification, the sale of advertising space on own account is excluded from the Advertising class (e.g. sale of advertising space by a television station is considered part of the operation of the television station, whereas sale of advertising space by a media agency is considered Advertising activity).

2.2 Product classification

Following the need to separately measure the creative and sale activities, the Central Product Classification (CPC 2.0) delineates group Advertising services and provision of advertising space or time (836) into the creative class 8361 Advertising services, plus two sales classes 8362 Purchase or sale of advertising space or time, on commission, and 8363 Sale of advertising space or time (except on commission).

This approach is reflected in the Statistical Classification of Products by Activity in the European Economic Community, 2008 version (CPA 2008), which splits Advertising Services (73.1) into Services provided by Advertising Agencies (73.11) and Media Representation Services (73.12).

Similarly, the North American Product Classification System (NAPCS, still being finalised) delineates advertising services according to sales type activities and a range of creative activities.

As indicated above, beyond the split between sales and creative activities, a key feature of the detailed levels of classifications is differential focus on type of media. A comparison of the detailed product and industry classifications for advertising services is provided in the Appendix.

3 Advertising turnover

The 22nd meeting of the Voorburg Group in Seoul, Korea, determined that much of the previous work undertaken for SPPIs required extension to turnover statistics. Such an extension would better enable the Group to make recommendations to ensure comparable measurement of the output of the Service Sector to constant prices.

With respect to Advertising services, the issue of turnover had, in fact, been previously considered. A model survey for Advertising services was proposed by Cadin & Trogan (1993) and a second piece of turnover research, presented to the 19th Voorburg Group in Ottawa, Canada, by Velasco Gimeno, were analyses of the Eurostat project to provide quality harmonised statistics on business services.

3.1 Advertising turnover and other NSIs

Twenty countries responded to the turnover section of the ONS-CSO questionnaire. Of these countries, 18 currently produce turnover statistics for advertising. Turnover statistics for this industry are not collected by Brazil or China.

3.1.1 Data collection at the product level

As discussed in the section on classification, the advertising industry can be broadly divided into two separate activities: advertising placement and advertising creation. Since these two activities are often carried out by different companies and the fee charged for each activity is driven by different factors, it is advisable that attempts should be made to collect their turnover separately.

Currently, out of the 18 countries who collect turnover data for this industry, 10 countries collect at the product level and a further three countries indicate that they are planning to collect at this level in the near future. Several countries suggest that it is often difficult to collect data at this level of detail. This may be because companies do not retain information in sufficient detail in their accounts (UK) or that data collection is limited due to concerns with the limitation of respondent burden (Poland, Ireland). The issue of respondent burden is quite important for this industry. In the UK, companies with less than 10 employees make up 90.6% of the total number of companies and contribute 19.5% of the total turnover (Table 1). Respondent burden can be reduced by the use of administrative data and this method is used by six countries with three countries indicating that they use this data for small businesses only (The Netherlands, USA, Poland).

TABLE 1 – NUMBER OF COMPANIES AND TURNOVER BROKEN DOWN BY EMPLOYMENT BAND (UK)

Number of employees	Number of companies	% of total	Turnover (£ 000)	% of total
0-4	11,147	81.0	2,538,967	11.9
5-9	1,321	9.6	1,616,319	7.6
10-19	693	5.0	1,614,077	7.6
20-49	365	2.7	2,393,559	11.2
50-99	121	0.9	2,129,942	10.0
100-249	72	0.5	3,634,131	17.0
250-499	26	0.2	4,699,173	22.0
>500	12	0.1	2,702,561	12.7
Total	13,757	100.0	21,328,729	100.0

3.1.2 Periodicity of data collection

Seven out of the 18 NSIs collect turnover data on a monthly basis. Four countries collect data on a quarterly basis and the remaining seven countries collect on an annual basis. The majority of countries who collect on a monthly or quarterly basis also carry out some form of annual or 5-yearly survey. The primary requirement for turnover collection is that it should be collected at a frequency that matches the needs of national accounts. Annual collection is likely to be too infrequent for use in the national accounts and is likely to need some form of interpolation.

3.1.3 Gross or net approach?

3.1.3.1 Sale or Leasing activities of Advertising space or time

Media agencies are usually the main providers of the service of advertising placement (Figure 1 shows the various interactions between different entities within the advertising industry). As part of their service these agencies will purchase advertising space from the media on behalf of their customer and will usually act as brokers in this transaction. This means that they will bring together the media and the customer and charge a fee, usually either a fixed or commission fee. However, there are two different ways that the money may change hands in this transaction. The first is that the agency may charge their client their fee only and the client will pay the media directly for the advertising space purchased. Secondly, the media agent may act like a wholesaler in the transaction. Whilst the activity is not actually wholesale since the agency doesn't take ownership of the advertising space and can only make the purchase on a named client basis, in many countries, the agency will take on legal responsibility for the transaction and the client may pay the agency both the fee for the services and the price of the media space. Therefore, in this example, the client will purchase both the media buying service and the media space itself from the media agency.

The method that should be used to collect turnover for this activity, will depend upon the structure of the advertising industry and email correspondence has indicated that this will vary internationally[8]. Where the media agency acts strictly as a broker in the transaction and charges their client only for their services (e.g. USA), turnover should be collected on a net basis. Where the media agent appears to act like a wholesaler and charges their client for their services and the cost of the media space (e.g. UK) turnover should be collected on a gross basis. In some countries, there may be a mixture of wholesale and brokerage within media purchase (e.g. Germany). In this case, the questionnaire should ask the respondent for the billing method used as well as the turnover achieved.

3.1.3.2 Planning, creation and placement of advertising activities

For the creative aspect of advertising, advertising agencies will usually only charge their fee for the design of the advertisement. Since agencies only charge their client for their fees, the net approach should be adopted. However, this method of billing is not necessarily the case in all countries and in Germany[9], billing methods vary between agencies. For this reason, it is crucial that the billing method is identified prior to turnover collection.

However, whilst larger companies offer either a placement *or* a creation service, some advertising agencies, usually smaller firms, will offer a full service, that is they will create the advertisement and purchase the advertising space. In this case, it may be very difficult to separate the turnover for creative services and media placement. For this reason, it may be simpler to collect turnover for these "full service agencies" separately.

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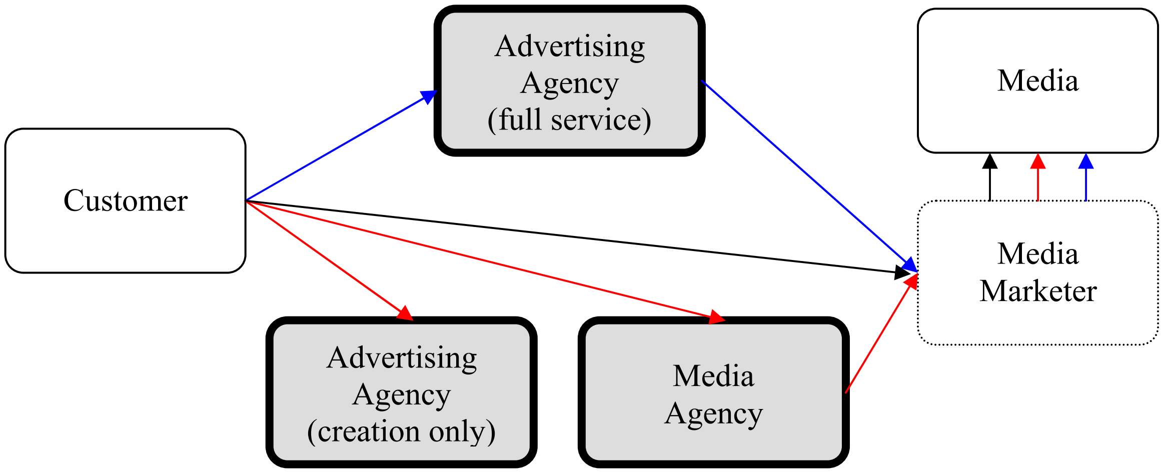
[8] Matt Berger (ONS), Vera Norrman (Statistics Sweden), Manuel Wirsing (DeStatis), Roslyn Swick (US Bureau of Labor Statistics) and Seppo Varjonen (OECD), *et al*, contributed to this discussion

[9] Email correspondence with Manuel Wirsing (DeStatis)

FIGURE 1. THE MAIN COMPANY TYPES AND POSSIBLE CONNECTIONS BETWEEN CUSTOMER, MEDIA AND AGENCY
Only those companies in shaded boxes are in-scope of Advertising Services. Coloured arrows show the different routes that can be taken to publish an advertisement.



Entity	Activities
Advertising Agency (creation only)	Creating advertising content, planning and guiding campaigns
Advertising Agency (full service)	Provide a full service from creating the advertisement to planning and purchasing the media space
Media Agency	Consultants or experts on ad-space and target groups, consulting on and buying of ad-space
Media Marketer	Sellers of ad-space on behalf of the media, often affiliates of media companies – also known as Media sales houses
Media	TV and radio, newspaper, magazines, internet, billboards, means of transport, buildings, leaflets

3.2 Turnover recommendations

It is difficult to determine a complete set of internationally valid recommendations for the collection of turnover since the approach that is required, particularly regarding collection on a net or gross basis, will vary depending upon the structure of the advertising industry. Therefore, the recommendations listed below are only intended as a guide.

A method
1. Identify whether agencies bill as brokers or wholesalers and request net or gross turnover as appropriate.
2. Collect turnover data at the product level
3. Collect sub-annually (monthly or quarterly, dependent on National Accounts requirements)
4. Ensure data collected from small enterprises as these represent a significant amount of industry turnover

B method
1. Identify whether agencies bill as brokers or wholesalers and request net or gross turnover as appropriate.
2. Collect turnover data at the industry level
3. Collect sub-annually but at a lesser frequency than required by National Accounts
4. Survey larger companies and use administrative data for smaller companies to minimise respondent burden

C method
1. Attempt to collect turnover without asking respondents whether they bill their clients like brokers or wholesalers.
2. Collect turnover at the industry level
3. Collect data annually
4. Ignore turnover from smaller companies.

4 Advertising SPPIs

When developing an SPPI, customer requirements are of primary importance. National accounts are usually the main customer of SPPIs, where they are used in the deflation of turnover data. It is therefore crucial that, before attempting to develop an index, consideration is given to the turnover data that is collected to ensure that any index produced will be a suitable deflator for this data. Unfortunately, for advertising services, where gross turnover is collected, an SPPI that is suitable for deflation purposes may need to include inflation from other services in addition to advertising. In this case, it may be very difficult to produce an SPPI that exactly matches the needs of all customers.

4.1 SPPIs for Sale or Leasing activities of Advertising space or time

Of the 15 national statistical offices who publish an SPPI for the advertising industry, 14 publish an index which covers, at least in some part, advertising placement.

4.1.1 Defining the product

One of the biggest challenges for developing an SPPI for this industry is defining precisely what the service to be measured is. Advertising placement activities, often offered by media agencies, offer the service of planning and buying advertising space from the media on behalf of their advertising clients. Whilst the process of buying the media space is an important part of the service, perhaps the most important part is the planning and evaluation of all factors that will affect the success of an advertising campaign. Examples of factors that will be considered as part of the advertising placement service include: pricing rates; demographics; geography and psychographics. These factors will be taken into account to determine which media to use and the frequency and time of day to show the advertisement. Furthermore, in the UK, the media agency takes on the risk of acting as “principle in law” in the purchase of the media space. This means that if the advertising client were unable to pay for the media space, the media agency would then be liable for all of the costs and media agencies will sometimes take out insurance to protect themselves from this risk. However, this legal aspect is not the case worldwide. In the USA, the advertising client takes on all the risk of the purchase but in Canada, the risk is shared between the agency and its client.

Whilst measuring changes in the net fee charged by agencies for the service of planning and buying media space may provide an adequate measure of inflation for this service, will it be suitable as a deflator for turnover? This will depend purely upon whether turnover is collected on a net or gross basis. Where turnover is collected on a gross basis, it will include not only the fee for the provision of the service, but will also include the cost of the media space itself. However, only the fee charged by the media agency is classified as “advertising services” under ISIC class 7310. The price of the media space itself represents either broadcasting or publishing activities, activities which are explicitly excluded from the ISIC class.

Where turnover is collected on a gross basis, to act as a suitable deflator, an SPPI should contain prices for both the service of the media agency and the advertising space itself. For example, if the price for the service of advertisement placement remains unchanged but the price for the advertising space increases then the total turnover for the advertising agency will also increase. If the SPPI includes the activity of the advertising agency only and therefore shows no change, when used as a deflator for the turnover collected, it will suggest that advertising output has increased, when in actual fact, the service provided by the agency has remained the same.

The common approach currently taken by national statistical offices to sale or leasing activities of advertising space or time is to consider these types of activities for each of the more typical advertising media: Television or radio, print media (newspapers or magazines), internet and outdoor advertising. It is widely considered that type of medium is the most significant price determining characteristic of the service, although many other characteristics are considered when determining representative transactions, and to allow products to be priced to constant quality. These include:

- length, size and type of the advertisement,
- placement and positioning,
- coverage,
- colour,
- day and time of diffusion etc.

4.1.2 Pricing method

The price of a repeated service (both transaction and list prices) and the unit value method are the main types of pricing methodologies used for SPPIs for this industry. The typical approach is to define a product using the types of characteristics identified above, and then either repeatedly price this product over time, or take a per unit average of revenue received. In each case, some indication of "size" of the advertisement is used.

For example:

- Price per half page advertisement in a Thursday edition of a particular large city newspaper (repeated service from Czech Republic)
- Price charged per 20 seconds for radio commercial (repeated service from Japan)
- Price for an illuminated advertisement in Helsinki railway station, size 490cm x 198cm, for 2 weeks (repeated service from Finland)

However, two recurring issues arise, which are approached differently by different national statistical offices.

4.1.2.1 Price for the service, or total price paid by the customer?

Depending upon the particular business model employed within a country (or perhaps, by the advertising sales establishment) a divergence may appear between the *price for the service* (of selling the space for the advertisement) and the *price paid by the customer*. This occurs since the customer may pay the agency the fee for the service *and* the media space or they may pay the agency the fee for the service only.

If the sales agency receives income on commission, and the rate of commission stays fixed, then changes in the prices collected do measure changes in the prices paid for the service. However care should be taken if making this assumption since commission rates do fluctuate even though they tend to stay close to a particular rate. The US Bureau of Labor Statistics attempts to avoid this issue by collecting the commission rate that would be charged and the cost of the advertising space or time that is purchased. This commission rate is then applied to the cost of the advertising space to give the price.

Furthermore, the sales agency may instead charge a fixed fee or a fixed fee with some performance bonus (which may be based on price targets or success of the campaign) and in this case, it would not be fair to assume that changes in the prices collected for media space measure changes in the prices paid for the service.

Given this, it is advisable to collect prices separately depending on pricing mechanism used by the sales agency. Such an approach is indicated in the CPC (2.0) where advertising placement is broken down into "8362 – purchase or sale of advertising space or time, on commission" and "8363 – sale of advertising space or time (except on commission)".

4.1.2.2 Is audience size a measure of quality?

Of the 15 countries who publish an SPPI for Advertising, half of these account for audience size in some way in their index. In response to the recent ONS/CSO inquiry, and as detailed in a paper by Buisson & Lensigne (2002)[10], national statistical offices attempt to account for the "audience" issue in many ways.

First and foremost, audience is accounted for (as appropriate) in the product description. An explicit description (such as "per 1,000 viewers" for a given 30 second television commercial) is applied in those cases where the audience is likely to vary substantially and where often, the advertising space is purchased on a "price per viewer" basis. Other approaches here include descriptions of the composition of the intended audience, a broad description of the expected audience by reference to the timeslot, or inclusion of television or radio "ratings". More implied approaches are typically undertaken for print media (where readership patterns are more stable over time and where space is usually purchased using a fixed fee for the size of the advertisement, regardless of circulation figures), and statement of day or edition indicates differences in expected audience. Second, the impact of "audience" is often reflected in the pricing method, where a discount or rebate is applied to another rate. Examples of the treatment of audience and discounts are shown in Table 2.

However, is audience size an appropriate measure of quality? During the process of planning advertisement placement it is not only audience size that is considered. An advertiser may wish to maximise the frequency the advertisement is viewed by the target audience instead of the total number of people who view the whole campaign. Also, an advertiser may pay a premium for a more economically active or attentive audience, even if that audience is smaller.

Furthermore, should an increase in audience size be considered as a quality change for the service of planning, selecting the media type and then arranging the purchase of the space, as provided by the media agency? Whilst audience size is an important price determining characteristic for the service of the broadcast or publication of advertisements by the media, ISIC clearly indicates that these activities are out of scope for advertising. Audience size is not a measure of the quality of advertisement placement services and even if media prices are collected to represent changes in the price of the service, this does not mean that audience size affects the service offered by the sales agency.

Typically, television and radio advertising space is bought on a cost per thousand basis where estimated audience figures are used to calculate the cost. If these estimated figures are not achieved, the media company will attempt to recompense the advertiser by offering additional advertising. Therefore, where this occurs, both the cost to the advertiser and the turnover of the advertising agency will remain the same. As a result of this, extreme care should be taken when using the average unit value method. If estimated audience sizes aren't achieved, then by using this method with actual audience figures, it would appear that the unit value has increased, when, in reality, there has been no change.

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[10] *Op. Cit.*

TABLE 2 – EXAMPLES OF PRICE SPECIFICATIONS USED FOR ADVERTISING SALES FOR DIFFERENT MEDIA
Selected from ONS-CSO inquiry, 2009

	Japan	Czech Republic	France	Germany[11]	Spain	United Kingdom
Print media	Price per column in national newspaper	Price of ½ page on a Thursday in black and white	Price for one column in selected page	Unit value $= \frac{\text{Price of one page in press - discount}}{\text{Circulation figures}}$	Unit Value $= \frac{\text{Turnover}}{\text{Number of advertising pages}}$	Advertising rate card price, adjusted by audience and discounting factors[12]
Radio commercial	Price per 20 seconds	Price of a regional ad, played on a Tuesday at 11am with length of 30 seconds	Price for one minute	Unit value $= \frac{(\text{Price of radio spot} - \text{discount})}{\text{audience figures}}$	Unit Value $= \frac{\text{Turnover}}{\text{Number of minutes}}$	Unit Value $= \frac{\text{Revenue}}{\text{audience figures}}$
Television commercial	Price per second	List price per one reference rating point = price per 1% of target audience (one advert display, length of 30s, 1% of the target audience 'age 15+'). The size of ratings as a quality variable is not taken into account; discounts are not surveyed	Price for one minute during prime time	Unit value $= \frac{(\text{List Price} - \text{discount})}{\text{audience figures}} \times 1{,}000$	Unit value $= \frac{\text{Turnover}}{\text{minutes} \times \text{audience}}$	Unit Value $= \frac{\text{Revenue}}{\text{audience figures}}$
Internet	Price per click on a keyword searching advertisement	Unit Value $= \frac{(\text{Cost per 1,000 views})}{\text{Area of internet banner}}$	Price per internet banner of specified size (300×250), cost per 1000 views			

[11] Results are preliminary during the year until information on the level of discounts is known.
[12] The ONS has, until very recently, incorporated measures in their Advertising SPPIs to account for change in discounts for press advertisements. Recent analysis has indicated that these "discount" data are unreliable, failing to capture actual discounting practice and simply adding noise to the index. The ONS will discontinue the use of "discounts" for this particular SPPI until more robust measures of discounting can be reliably determined.

4.1.2.3 Business to All, or Business to Business?

For the EU member states, development of SPPIs has focused solely on measuring price change on a business to business basis, therefore collecting prices for domestically produced intermediate consumption. However, does this align with the collection of turnover statistics? Turnover data is collected on a business to all basis, since it is the *total* turnover (i.e. to all consumers of the service) that is requested. Whilst it may be reasonable to assume that intermediate consumption accounts for the majority of the use of the service, it is not reasonable to assume that all other uses of the service are negligible. In the UK, the national accounts show that exports are a significant use of advertising services (Table 3) and whilst turnover data will be collected including exports for use in the national accounts, it is excluded from most SPPIs.

TABLE 3 – ADVERTISING TURNOVER BY USE FOR THE UK

Use	Turnover (£ million)	% of total turnover
Intermediate consumption	21,762	89.8
Household	91	0.4
Gross Capital Formation	59	0.2
Exports	2,337	9.6
Total	24,249	100.0

4.2 Planning, creation and placement of advertising activities

Service PPIs for the more creative aspects of advertising are covered by seven out of the 15 national statistical offices who currently publish an advertising SPPI. Measurement of this activity is, in many ways, similar to measurement of a range of other business services, where a different bespoke product is delivered to each individual customer, and where the service provider (advertising creator) uses a pricing mechanism that incorporates a fee for time worked. As such, the typical solution to the creative side of the advertising industry is to use a model pricing approach, and where that approach is too burdensome (or deemed to result in data of unsuitable quality), resorting to a pricing method based on working time.

4.2.1 Model pricing

The price collected by the US BLS[13] is a transaction price for a model, which includes the total revenue amount billed for labour (labour rates multiplied by number of hours worked by each individual involved in the project) plus any additional non-labour fees charged (for example, mark-ups on services provided by outside vendors, travel, and administrative fees). Another type of price is a unit value for a specified professional providing a specified type of service. For example, an item's unit value price may be the "average" rate charged by all junior copywriters working on television advertisement creative services. To calculate this price, the total revenue billed by these workers is divided by the total number of hours billed during a specified period. This type of price is collected far less often than the model transaction prices.

4.2.2 Pricing Methods based on working time

Most countries indicated some use of methods based on working time. As with other business services, these methods are adopted where respondent burden or data quality issues cause the failure of model pricing approaches. The chief concern with this approach is that the resulting SPPI (and hence any resulting volume measures) are biased because of the inability to capture changes in productivity[14]. National statistical offices indicated that to reduce (although not eliminate) this bias, the methods based on working time collect data based on different functional expertise of staff, as well as different experience and seniority. Examples of such approaches are provided in Table 4.

TABLE 4 – EXAMPLES OF METHODS BASED ON WORKING TIME USED FOR ADVERTISING CREATIVE ACTIVITIES
Selected from ONS-CSO inquiry, 2008

Country	Method based on working time
USA	Collect amount charged for labour (hourly rate multiplied by number of hours worked by each individual) plus additional non-labour charges (e.g. administrative fees)
Finland	Collect rates per hour for each grade of staff working on project
France	Charge out rates per qualifications or percentage fee per type of client
Poland	Collect average monthly charge out rates by staff specialism
Ireland	Contract of 100 hours work –breakdown of people involved and their charge rate for % of work done in project
Netherlands	Realised charge out rates, divided in the specialties: Strategy, Creation (desktop publishing and creation of ideas), Operations, and Account.[15]

[13] The BLS was the only agency to confirm the use of model prices, although CBS Netherlands indicated that they wish to adopt this approach since "realised charge out rates does not work because there is almost no relation between the hours and revenues".
[14] Some European nations indicate that this method is classified as "B-method" by Eurostat (2001), together with other services industries like legal services, accounting, book-keeping and auditing services, architectural, engineering and related technical consultancy services among others. Despite this recommendation, methods based on working time remain biased in those circumstances where the relationship between labour and outputs is not fixed.
[15] This method does not work as hoped, and CBS Netherlands have indicated they are developing model prices similar to USA's approach with architects.

4.3 Other considerations for SPPIs

From the answers to the ONS-CSO questionnaire, at the moment, 15 countries produce SPPIs for advertising, in whole or in part. Apart from questions about the classification being used and the types of collected prices for individual advertising services, which are analysed in previous chapters, the questionnaire asked additional questions on aspects of SPPI operations.

4.3.1 Sampling techniques

Results from questionnaires show that sampling methods differ from country to country. The vast majority of countries use non-probability sampling (purposive and judgemental) based on turnover. Among other techniques some countries also use PPS (e.g. Sweden) and cut off sampling (e.g. Austria, Israel). Sampling is mainly based on their business register. However, some countries apply different sources such as the databases or registries of associations or external companies.

4.3.2 Periodicity of data collection

In nearly all countries data collection is quarterly; the exceptions are Korea, Czech Republic, Ireland, USA and Japan, where prices are collected more frequently. Since the main goal is to provide a suitable deflator for value developments, mainly for national accounts, quarterly frequency is considered sufficient[16]. Furthermore, for the moment in the EU Member States it has been agreed to collect prices for SPPI quarterly.

4.3.3 Sample sizes

Table 5 shows that several countries use external sources for collecting prices or additional data. As large companies do not dominate in advertising services large samples sizes are required. Countries which have small sample sizes have indicated plans to extend the number of selected companies.

[16] Provided of course that national accounts are produced no more frequently than once per quarter.

TABLE 5 – SAMPLE SIZES OF ADVERTISING SPPIs

Selected from ONS-CSO inquiry, 2009

	Coverage	Sample size
Austria	Sale or leasing activities of advertising space or time	38 companies (101 quotations)
Czech Republic	Sale or leasing activities of advertising space or time	TV advertising: 3 companies (3 quotations) Radio advertising: 3 companies (25 quotations) Print media: 6 companies (40 quotations) Outdoor ad: 14 companies (80 quotations) Internet: 3 companies (6 quotations)
Finland	Sale or leasing activities of advertising space or time	Outdoor advertising: 6 companies Radio advertising: 9 radio stations Advertising in newspapers and magazines: 7 companies TV advertising: 2 companies
	Planning, creation and placement of advertising activities	30 companies
Germany	Sale or leasing activities of advertising space or time[17]	TV advertising: 1 database (69 price indicators) Radio advertising: 1 database (34 price indicators) Print media: 2 databases (428 price indicators) plus 28 webpages (28 price indicators) Outdoor ad: 1 database (220 price indicators)
	Planning, creation and placement of advertising activities	Creative agencies: 81 enterprises (690 quotations) Media agencies: 27 enterprises (124 quotations)
Ireland	Sale or leasing activities of advertising space or time	37 companies (167 quotations)
	Planning, creation and placement of advertising activities	
Israel	Sale or leasing activities of advertising space or time	20 companies (120 quotations)
Japan	Sale or leasing activities of advertising space or time	Confidential information
Netherlands	Sale or leasing activities of advertising space or time	84 companies (295 quotations)
	Planning, creation and placement of advertising activities	
Spain	Sale or leasing activities of advertising space or time	External source (669 quotations)
United Kingdom	Sale or leasing activities of advertising space or time	External source
USA	Planning, creation and placement of advertising activities	Confidential information

[17] Germany collects prices from external sources (databases and webpages) and not using a survey. Additional information on discounts comes from 10 media agency networks.

4.4 Recommendations for SPPI

Since it appears that there are large differences between the advertising industry practices in different countries, it is very difficult to produce a comprehensive set of recommendations for the development of an SPPI. The primary concern is to ensure that the index developed is suitable for use within the national accounts and therefore it must mesh with the turnover data collected. This may result in a conflict where an SPPI designed for national accounts may not be useful to other customers. If this conflict is considered great enough, consideration may need to be given to producing more than one index. This approach has been taken in Germany.

4.4.1 Net approach

The recommendations below represent what would be needed to develop an SPPI for advertising services where advertising agencies bill their client for the fees charged for the service only (therefore excluding the price of the media space) and turnover is collected on a net basis. Using this approach, there is no need to make quality adjustments based on audience size since audience size is not controlled by the advertising agency.

A method

1. For advertising placement: collect the actual fees charged by agencies separately for each pricing mechanism used by sales agency
2. For advertising creation: collect actual fees charged by advertising agencies
3. Collect and publish sub-annually at a frequency that matches that of turnover collection and the requirement of national accounts
4. Collect prices and publish at the product level

B method

1. For advertising placement: collect the price for media space where a commission fee is charged (using no adjustment for audience size). Collect the actual fees charged where other pricing mechanisms are used.
2. For advertising creation: collect hourly rate based on grade or experience of staff
3. Collect and publish sub-annually but at a lesser frequency than turnover collection.
4. Collect prices at the product level but publish at the industry level.

C method

1. For advertising placement: collect prices for media space only
2. For advertising creation: collect hourly rate only
3. Collect and publish on an annual basis
4. Collect prices and publish at the industry level

4.4.2 Gross approach

These recommendations suggest what would be required for an SPPI where advertising agencies bill their client for both the fees for the service and the cost of the media space. Since the price of the media is included, this index will include prices for broadcasting and publishing activities. Even though the cost of the media space is included here, it is recommended that no quality adjustment should be made for audience size. In the case of TV or radio advertising, space is often purchased on a "cost per thousand" basis, where estimated audience figures are used to calculate the price. Should these audience figures not be achieved, the client will receive additional advertising space in compensation. However, this does assume that the service provided has been adequately described in the service specification. An SPPI developed using this approach, whilst suitable for national accounts, may not meet the requirements of other customers.

A method

1. For advertising placement: collect the total charges billed by the agency including both the placement service and the cost of the media space. Collect these prices separately for each pricing mechanism used by the agency
2. For advertising creation: collect actual fees charged by advertising agencies
3. Collect and publish sub-annually at a frequency that matches that of turnover collection and the requirement of national accounts
4. Collect prices and publish at the product level

B method

1. For advertising placement: collect the price for media space only where a commission fee is charged. Collect the actual fees charged and the price of the media purchased where other pricing mechanisms are used.
2. For advertising creation: collect hourly rate based on grade or experience of staff
3. Collect and publish sub-annually but at a lesser frequency than turnover collection.
4. Collect prices at the product level but publish at the industry level.

C method

1. For advertising placement: collect prices for media space only
2. For advertising creation: collect hourly rate only
3. Collect and publish on an annual basis
4. Collect prices and publish at the industry level

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APPENDIX – Classifications of Advertising Activity

A1 Industrial classifications

<table>
<tr><th>ISIC Rev 4</th><th>NACE Rev 2</th><th>NAICS 2007</th></tr>
<tr><td>7310 Advertising
This class includes the provision of a full range of advertising services (i.e. through in-house capabilities or subcontracting), including advice, creative services, production of advertising material, media planning and buying.

This class includes:
- creation and realization of advertising campaigns:
· creating and placing advertising in newspapers, periodicals, radio, television, the Internet and other media
· creating and placing of outdoor advertising, e.g. billboards, panels, bulletins and frames, window dressing, showroom design, car and bus carding etc.
· media representation, i.e. sale of time and space for various media soliciting advertising
· aerial advertising
· distribution or delivery of advertising material or samples
· provision of advertising space on billboards etc.
· creation of stands and other display structures and sites
- conducting marketing campaigns and other advertising services aimed at attracting and retaining customers:
· promotion of products
· point-of-sale marketing
· direct mail advertising
· marketing consulting</td><td>73.11 Advertising agencies
This class includes the provision of a full range of advertising services (i.e., through in-house capabilities or subcontracting), including advice, creative services, production of advertising material, and buying.

It includes:
- creation and realisation of advertising campaigns:
• creating and placing advertising in newspapers, periodicals, radio, television, the Internet and other media
• creating and placing of outdoor advertising, e.g. billboards, panels, bulletins and frames, window dressing, showroom design, car and bus carding etc.
• aerial advertising
• distribution or delivery of advertising material or samples
• creation of stands and other display structures and sites
- conducting marketing campaigns and other advertising services aimed at attracting and retaining customers
• promotion of products
• point-of-sale marketing
• direct mail advertising
• marketing consulting</td><td>541810 Advertising Agencies
This industry comprises establishments primarily engaged in creating advertising campaigns and placing such advertising in periodicals, newspapers, radio and television, or other media. These establishments are organized to provide a full range of services (i.e., through in-house capabilities or subcontracting), including advice, creative services, account management, production of advertising material, media planning, and buying (i.e., placing advertising).</td></tr>
<tr><td></td><td>73.12 Media representation This class includes
- media representation, i.e. sale or re-sale of time and space for various media soliciting advertising</td><td>541830 Media Buying Agencies
This industry comprises establishments primarily engaged in purchasing advertising time or space from media outlets and reselling it to advertising agencies or individual companies directly</td></tr>
</table>

A2 – Product classification – Classification of Products by Activity

Code	Description	This item includes
73.11.11	Full service advertising services	This subcategory includes: - provision of the full range of advertising services, including planning, creation and execution services, such as: - selection of media to be used - design of advertisements, illustrations, posters, etc. - writing of scenarios for advertising movies, placement in media, planning (without production) of advertising objects or films - organisation of direct marketing or direct mail advertising campaigns
73.11.12	Direct marketing and direct mailing services	This subcategory includes: - the developing and organisation of direct marketing advertising campaigns, that is, organising sending of advertising and promotional messages directly to consumers, rather than via mass media Includes methods such as direct mail and telemarketing.
73.11.13	Advertising design and concept development services	This subcategory includes: - creating the basic idea for an advertisement, drafting the words - designing the layout for a print advertisement, illustration, poster - writing of scenarios for advertising movies
73.11.19	Other advertising services	This subcategory includes: - aerial advertising services - delivery services of free samples and other advertising material - demonstration and presentation advertising services at point of sale - sales promotion services (if no orders are received)
73.12.11	Sale of advertising space on a fee or contract basis in print media	This category includes: - sale or leasing services of advertising space or time on a fee or contract basis - services of media buying agencies, which buy media space or time on behalf of advertisers or advertising agencies
73.12.12	Sale of TV/radio advertising space or time on a fee or contract basis	
73.12.13	Sale of Internet advertising space or time on a fee or contract basis	
73.12.14	Sale of events related advertising	This subcategory includes: - sale of naming rights for tournaments, stadiums, etc.
73.12.19	Other sale of advertising space or time on a fee or contract basis	This subcategory includes: - sale of advertising space or time on billboards, buildings, vehicles, etc. - sale of advertising space or time in electronic media other than online - sale of advertising time in video and motion pictures (product placement)
73.12.2	Resale of advertising space or time on a fee or contract basis	