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Mini-presentation on ”Advertising Agencies” (SPPI)

CPA: 73.11

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1. Description and characteristics of the industry

1.1 Definition of the industry

- Definition of service

Firms that intend to bring their brands, products or services to the attention of consumers usually use advertisements. The advertising message can reach the public through media such as billboards, printed press, television, radio, cinema, the Internet, etc.

Advertising agencies are companies that provide their services to develop the message, create the advertisements adapted to the media, plan the media strategy and buy media space from publishers or their representatives.

Media planning and buying of advertising space can also be carried out by *media agencies,* companies specialized in negotiating space. Advertising agencies and media agencies are in the scope of the 73.11 industry, whereas media marketers on behalf of publishers are linked to 73.12 (media representation).

Advertising can also take the form of promoting actions that are conducted outside media, such as direct-to-consumer marketing campaigns (mail and email advertising, distribution of advertising material, promotion at point-of-sales or during trade shows etc.). Companies that conduct such campaigns are considered to be in the scope of the 73.11 industry. Organization of visits to doctors or pharmacists by pharmaceutical representatives are also included.

A division of the industry can be found in the CPA 6-digit classification:

73.11.1 Services provided by advertising agencies

- 73.11.11 Full service advertising services
- 73.11.12 Direct marketing and direct mailing services
- 73.11.13 Advertising concept development services
- 73.11.19 Other advertising services

- Classification issues

The demarcation between different advertising or related activities is sometimes very blurred in the official classifications.

"*Lobbying*, concerning methods to improve the image and relations of an organization" i.e., without marketing or advertising, is considered to be outside the scope of the 73.11 industry: this corresponds more to the 70.21 industry (public relations).

For commercial non-individualized mail such as leaflets, the CPA classification splits the activities into several divisions:

- the publishing of the advertising material in 58.19 (other publishing services),
- the sending (envelope addressing, sealing) in 82.19 (photocopying, document preparation and other specialized office support services),
- the delivery in mailboxes in 73.11.

Services from advertising film producers or advertising photographers, often under contract with advertising agencies, are classified with their respective industries (59.11 for films producers, 74.20 for photographers). There is also a specific service industry for trade shows organizers (82.30).

The services of graphic designers of advertisements have recently been moved away from 73.11: the CPA version 2.1, used since 2015, now explicitly excludes their services, whereas they were included in the 2008 version. Thus, the border between "advertising concept development" (73.11.13) and "graphic design for advertising" (74.10.19) has been discussed: to be considered in 74.10.19, graphic design has to be an autonomous service: for instance, the graphic design of posters for an advertising campaign shall not include

other services like the planning, the choice of sites etc. This is typically the case when an advertising agency outsources the graphic design to a design office.
Many micro-agencies are involved only in conception or advertising design. There may be misclassifications: in the 2015 version of CPA classification, graphic designers for advertising should be classified with the 74.10 (design) industry, especially if they work for bigger advertising agencies.

Marketing agencies often disseminate gift coupons or reduced-price coupons. These coupons are outside of 73.11 and should be linked to the 82.99 industry (other business services n.e.c.).

There is a classification issue for "programmatic advertisement" (automated purchase of digital advertising space via software) on the Internet (see 1.3) that serves the buyer's side. Specialized units such as advertising trading desks (ATDs) or demand-side platforms (DSPs) need to be classified according to the characteristics of their respective role in the value chain. Technically, ATDs services are delivered from platforms called DSPs (demand-side platforms) where purchase orders can be placed; at the opposite end of the chain (seller's side), website publishers (or their representatives) run SSPs (supply-side platforms) to propose spaces. DSPs and SSPs conclude transactions in a machine-to-machine process, where the millisecond is the time unit. The most frequent transaction mode is an auction process, called "real-time bidding" (RTB).

The objective of ATDs is the placing of advertisements and many of them are affiliates of agencies or media groups, so there would be an argument to consider them as involved in the industry 73.11 in a product-based approach. Suppliers of DSPs may be considered as technology providers, and not contributors of the 73.11 industry.

To avoid misleading generalizations, examples have to be discussed with classification experts.

1.2 Market conditions and constraints

- Importance of the industry compared to the service industry and the whole economy

In France, the output of the 73.11 industry weighs €11.7 billion in 2016 and 1.2% of the total output of services industries used in INSEE SPPIs (merchant services excluding financial and insurance services). This CPA-4 industry is in the first quartile, in terms of output, among industries in French SPPI scope.
In the whole economy, the 73.11 industry weighs 0.5% of the total output.

- Public regulations affecting the market situation

The business model of the industry is very regulated in France. Agencies cannot act as media space wholesalers, to avoid some former practices, consisting in buying huge quantities of media space in order to resell them later at expensive rates (Sapin Law, 1993). Agencies cannot buy media space for themselves anymore; they only can buy them on behalf of advertisers. In other words, they cannot provide at the same time agencies services and media marketing.

In 2017, a decree was introduced to extend the Sapin Law to the case of advertising on the Internet, which was considered as less regulated. Regarding this decree, digital media space sellers have to produce a report of each media campaign mentioning the dates and locations of the advertisements, the total campaign fees and placement fees.

For real-time transactions, including auctions processes based on the consumer's profile, the seller has to mention on its report:

- the information to guarantee the effectiveness of the release of advertisements (websites, characteristics of the messages released, number of views or clicks or actions, etc.),
- the information on the IT tools used and partners involved (consultancies, IT services),
- the results achieved compared to the objectives of the advertiser or its representative.

Space sellers also have to avoid the dissemination of advertisements on websites mentioned as undesirable by the advertiser.

- Degree of concentration within the industry

In France, the industry is not as concentrated as many other services industries. The top 100 companies weigh 50% of the turnover of the industry, whereas the number of companies exceed 15 000.

Very small units are common among advertising agencies in France, as there are no strict regulations to establish an entity, and on the other hand, rather many training programs for communication professions. Numerous micro-agencies are created each year, with random durability odds.

The largest companies are trying to merge, in order to reach a critical size and reinforce their negotiating power, especially for media space buying. Mergers and acquisitions have been numerous among large agencies in the past ten years, and this is still the case for middle-size companies.

- Type of consumer of the services (B2B, B2C, B2X)

	Output (€m) in 2016	%
BtoB	7,543	64.7
BtoC	ε	ε
BtoX	4,112	35.3
BtoAll	**11,655**	**100.0**

Source: data processed from national accounts, 2016

More and more campaigns are globalized. French advertising agencies export significantly: about 35% of their turnover (€4.1 billion). But the weight of imports is also important (€5.3 billion). Large corporate groups are very important in exports; independent units can also significantly turn to foreign markets, especially when domestic demand is weakening.

Households consumption, limited to classified advertisements, is negligible.

- Horizontal/vertical integration

The major part of the turnover is realized by corporate groups. The largest groups are present at each level of the industry (advertising agencies, media agencies, marketing), with numerous subsidiaries, some of them very specialized (digital, events, health, etc.). It is common that a group creates a subsidiary dedicated to a small pool of large advertisers or sometimes to one single major advertiser.

Corporate groups may also have their own subsidiaries for the concrete realization of advertisements (films producers, photographers, graphic designers – activities that are out of scope of the 7311 industry).

The largest groups propose all-inclusive packages, and are sometimes called “global advertising agencies”. Their campaigns are mainly international, due to the globalization of brands. The largest advertising groups do not hesitate to try to take over independent innovative specialized agencies to integrate them in their products.

- **Trends**

Advertising agencies may interact with various advertisers from the whole economy. Despite this huge potential clientele, the industry is very sensitive to the slightest variations in the economic environment. In times of economic turmoil, advertising expenses are the first to be reduced by companies. However, the advertising budgets of some dynamic industries (telecommunication equipment, high-tech or luxury goods, health products) are less vulnerable to such turbulence.

According to national accounts, the advertising market tends to recover after a long non-vigorous period begun in 2008. The 73 industry output (including agencies, media representatives and market studies) increases in 2016 (+1.4%) and in 2017 (+1.8%).
In 2018, *according to professional sources*, growth is confirmed and is due to several media:

- the Internet: advertising receipts increase by up to 17% (search engines: +11%, social networks: +63%). In the last ten years, digital advertising receipts have been multiplied by two. The weight of “programmatic advertising” in digital media is more than 67% in 2018.
- Television: +2,4% (good performance throughout the year, and World Cup effect)
- Billboards: +2,3%

For other media however: such as radio, cinema, printed media, etc. the revenues are decreasing.

According to the same professional sources, manufacturers and travel agencies advertising expenses are increasing, whereas those of non-specialized distributors have stabilized.

- Product structure, primary / secondary products

We use the SBS source to split the turnover of the industry into detailed services; however, the French SBS questionnaire has its own sub-classes, which do not correspond to the official 5 or 6-digit CPA.

Leaflet delivery, direct marketing, including e-marketing	57,2%
Advertising agencies activities	33,7%
Other	9,0%
Total 73.11	**100,0%**

Source : French SBS (ESANE) 2016

Some agencies or group subsidiaries have been specialized by sub-sector.

- “Health communication agencies” have pharmaceutical firms as their main clients. Pharmaceutical advertisers were searching for specialized agencies, with experience of the institutional and regulatory environment, particular to each country.
- Agencies specialized in digital advertising: “digital agencies” or “pure players”. They often provide advanced “programmatic advertisement” technologies and their planning takes into account classic websites, social networks, video portals, mobile phones, etc.
- Some agencies are specialized in sports.

The relative weight of direct marketing, especially leaflet delivery, is particularly important in France compared to the whole 73.11 industry. Marketing agencies can offer the following services:
- physical dissemination to consumers in particular places or during a particular event, direct mail advertising, leaflet delivery in mailboxes,
- digital marketing: telemarketing, e-mailing and advertising through SMS.

1.3 Specific characteristics of the industry

- Nature of sales (e.g. bundling, reselling)

Most of important campaigns begin with calls for tender.

The activity of agencies (73.11) and media marketers (73.12) is well differentiated:
- The agency acts on behalf of the advertiser. It buys media space directly from publishers or to media marketers.
- The media marketer acts on behalf of one or several publishers, selling media space.

In this business model, agencies cannot be considered as media retailers or wholesalers. They never own the space themselves. Yet, they cannot be considered only as brokers whose role is limited to bring together advertisers and media marketers; they are engaged in the negotiation and in the buying: the advertiser transfers money to its agency, who pays for the media space and then provides the invoice back to the advertiser, with the obligation that every discount negotiated by the agency benefits the advertiser.

It is important to keep in mind that in France, unlike in some other countries, the direct responsibility of the advertiser clearly remains even after money changes hands. In case of failing of an agency, the advertiser remains responsible of the dues to the media marketer.

- Development of new products/services in recent years or expected in the near future

Innovation in advertising in traditional media has now reached certain limits. Attempts at renewal are now targeting advertising on the Internet. In a few years, digital advertising has gone from basic campaigns (e-mails postings, non-contextualized banners) to programmatic techniques of targeted advertisements, which have become more and more sophisticated over the years: banners based on web browser files, keywords bought by advertisers to search engines (ad-insearch / rich ad-insearch), contextualization by geolocation, “look-alike” shopping suggestions, etc.

The latest innovations are more and more ingenious, due to new tools and the use of huge databases: imputation of the user’s likely age, behavior modeling, are increasing the accuracy and performance of advertising displays.

“Advertainment” is not completely new, but has become a more and more important way to advertise since the evolution of video platforms to mass media: it consists in hiring video celebrities for product placements. In-game advertising or “advergaming” is also an efficient way to gain access to a young public.

Another tendency is to integrate advertising campaigns in specific events exclusively staged on the Internet, especially on social networks. For instance, the launch of a new product on a given date can be staged with advertorials, games, special discounts during the first day, etc.

- Short description of business models in the industry. Any recent changes or expected changes in the near future?

In the industry, advertising agencies may still be distinguished from media agencies, even if the border is more and more blurred. Advertising agencies carry out the creation and the realization of advertising campaigns. Some advertising agencies provide the full range of services (including space buying), whereas some others only create the concepts or materials, without placing the advertisements. Media agencies are specialized in media planning and space negotiating; they act on behalf of advertisers (or sometimes on behalf of their agencies), mostly for large or international advertising campaigns. An advertiser can contract with one advertising agency only, or with two agencies: an advertising agency for the creative aspects and a media agency for media planning and buying.

The selection of an agency by an advertiser is usually done through a call for tender. The advertiser describes the characteristics and the positioning of its product or brand, the objectives of the campaign it is expecting, and agencies are invited to bid.
Nevertheless, from the advertiser’s point of view, the selection of an advertising agency can be tricky. Specialized offices now propose consultancy services for selecting agencies. They provide assistance in order to analyze tenders and rank the applicants. These offices sometimes also advise the advertiser on its communication strategy, coming into the role of the advertising agency itself.
“Media auditing” companies go further. They propose their services to advertisers not only to select their agency, but also to monitor the work done by agencies, to evaluate the effective dissemination of the advertisements, to verify invoices emitted by agencies and to draw up a report of the advertising campaign. In France, according to professional sources, more than half of advertisers are used to hire media auditing companies.

It should be noted that media auditing services and consultancy services for selecting agencies are not in the scope of the 73.11 industry, but rather linked to communication consultancy (70.21).

The advent of “programmatic advertisement” is remodeling business models. Advertisers or their agencies usually contract with providers of advertising trading desks (ATDs), units that take on the role of digital space buying in a completely automated way. Their task is to optimize a campaign with targeted advertisement placing. Many parameters are taken into account: the quantitative objectives of the advertiser, the consumers profiles to target, the budget given by the advertiser or its agency.

Advertising trading desks are mostly subsidiaries of media groups or pure players. However, some of the larger advertisers appear to have recently taken steps to create their own internal ATDs to better control the process.

3. Measurement of SPPI

3.1 General framework

- Objectives of key users

The uses of SPPI are threefold in France: deflator for the service production index, deflator for national accounts, index of price revaluation for contract escalation.

Different characteristics may differ between these sources of SPPI use: inclusion of taxes and subsidies, inclusion of intra-group transactions (i.e. transactions between subsidiaries of the same corporate group) and periodicity of the deflator.

National accounts require basic prices for the supply side and purchase prices for the use side. Basic prices measure the turnover of the seller, so subsidies are included whereas taxes are excluded. Conversely, for purchase prices, subsidies are excluded whereas taxes (except VAT) are included. For the use of the service production index, both taxes and subsidies are excluded from the output value, so they should also be excluded from the deflator. Finally, for contract escalations, taxes (except VAT) are included but subsidies are excluded.

- National accounts concepts, measurement issues

Because of the business model in France, agencies usually have a budget at their disposal, transferred from advertisers on a gross basis, including the value of media space they expect to be negotiated. Yet, the output of this industry is taken into account on a net basis; that is, it includes the agencies services and nothing else (it will not include the media space negotiated, nor services outsourced like an advertising film realized by an external producer). Only that value added constitutes the output of the 7311 industry; if not, media space turnover would be counted twice, once for agencies and once for media representatives.

To obtain the net output on an accurate basis, national accounts can rely on data from the French SBS survey; in the SBS questionnaire for advertising activities, agencies have to declared separately:

- the amounts devoted to the purchase of space,
- the cost of other services bought and resold without added value.

For this industry, French National Accounts are calculated at CPA-4 level, and also released at CPA-4 level. The supply and use 2016 balance in France for 7311 appears below. The deflator used to assess National Accounts in volume is given in brackets. The deflator perimeter corresponds to 7311 Advertising agencies.

Supply (€m)

Output	+ Imports	+ Taxes
11 622	+ 5 250	+ 134
(BtoAll)	(BtoAll)	

Use (€m)

Intermediate consumption	+ Final consumption	+ Exports
12 846	+ ε	+ 4 160
(BtoB)	(BtoC)	(BtoX)

Advertising agencies services are mostly used in intermediate consumption and for exports. For imports, no SPPI can be assessed, because there is no sampling frame for imports. BtoAll SPPI is also used as a proxy for import deflation.

3.2 Measurement issues

- Product structure in industry, importance of product level details

For product structure in the industry, see 1.2 Market conditions and constraints.

- Type of SPPI described, sampling unit used – Industry/Product

According to paragraph b.1 of annex D of Council Regulation (EC) N°1165/98 of 19 May 1998 concerning short-term statistics, the SPPI sampling unit has to be the enterprise. The enterprise is defined in section 3 of the annex of Council Regulation (EEC) No 696/93 of 15 March 1993 on the statistical units for the observation and analysis of the production system in the Community: "*the enterprise is the smallest combination of legal units that is an organizational unit producing goods or services, which benefits from a certain degree of autonomy in decision-making, especially for the allocation of its current resources."*

The sample of this industry is now a mix of legal units and profiled enterprises, because enterprises have the possibility to choose to respond to SBS with two different ways: one questionnaire for the whole profiled enterprise, or one for each legal unit.

The French SPPI are product-based in the sense that price indices are aggregated from elementary indices that correspond to service products prices.

- Any data sources available (or used) for replacing surveys?

There is no data source available for replacing surveys for this industry.

- Any use of Big Data in the near future

No use of Big Data is scheduled in the near future for SPPI.

- Any direct volume information available

No direct volume information is available.

- Sampling design. Include any specific issues influencing the design in this industry and the sampling units necessary

For French SPPI, the sampling is determined at two different levels: first, firms and secondly, service products.

<u>Firms</u>
For firms, the sampling is the result of a two-step process:
- first, a statistical "cut-off" sampling
- secondly, a "well-informed choice" method, that tries to determine firms that would be omitted with the first process.

With the "cut-off" sampling, firms are ranked according to their turnover in the industry, known thanks to ESA survey or extrapolated from other sources. Main firms are chosen, up to a certain rate of the total turnover of the industry, but without exceeding a maximum number of firms.

For the 7311 industry, this process also permitted to “recruit” the most exporting firms.

Secondly, a “well-informed choice” method is applied. First, research conducted on the Internet aims at identifying firms that have been omitted with the first process. This is needed because some firms could have been wrongly classified. Besides, several industry federations of employers are contacted so as to discuss about industry matters, and in particular about sample.

The “cut-off” sampling allows this two-step method to determine firm surveys: there is no need to determine weights. With a “pure” PPS sampling, it would not be possible to “add” firms because there would be no way to determine weights for these firms.

In practice, 38 businesses are currently surveyed quarterly for the 7311 industry, and about 280 individual services for BtoB, 80 for BtoX.

Cut-off sampling has nevertheless the drawback that small firms cannot be selected. This is a source of bias, because small firms price policy has no reason to be identical to that of big firms. So, there is a possibility that price index estimators could be biased. In practice, economists consider that big firms are rather price-makers whereas small firms are rather price takers, which could lead to a reduced bias.

<u>Service products</u>

INSEE “Field surveyors” visit the enterprises of the sample in order to define or re-define with them which service products will be followed in a custom-made quarterly questionnaire. As a result, service products are not sampled from a sampling frame but are chosen by the field surveyors in accordance with a responsible person of the sampled firms, at the beginning of the update process.

The selected service products have to be representative of the price variation of a product family (kind of product x kind of market). In practice, the products with the highest turnover within each family are most often chosen.

- Data sources for various weights

Two main sources of weights have been presented before:

- for national accounts weights, see 3.1 National Accounts concepts, measurement issues
- for SBS weights, see 1.1 Product structure, primary / secondary products.

For this industry, the national accounts source is suited to SPPI weight needs: national accounts weights are split between BtoB, BtoC and BtoX and are calculated at the CPA-4 digits level.

However, there are some differences of concepts and scope between national accounts and SPPIs that lead us to process the data as follows:

- the use side from national accounts is evaluated at buying prices, including taxes and excluding subsidies on products, whereas SPPIs are measured at basic pices, excluding taxes and including subsidies,
- SPPIs consider the French output, whereas national accounts take into account all consumed or invested resources, produced in France or imported.

Finally, as French SPPIs are Laspeyres chain-linked indices, with weights at CPA-4 level updated each year, the resulting weights have to be price-corrected (if not, the price variation would be counted twice: once in the index and once in the weights).

For 7311, the resulting weights for 2016 are presented below:

	Weights (€m) in 2016
BtoB	7,543
BtoC	ε
BtoX	4,112
BtoAll	**11,655**

3.3 Description of pricing methods and criteria for choosing the method

- Definition of the service being priced

see 1.1

- Price determining characteristics of the service

Contracts with regular advertisers are mostly annual or spanning several years. The annual budget transferred by the advertiser is the subject of annual negotiations, more on the content of the campaign than on the price itself.

For new campaigns, the competitive pressure is strong: the number of agencies bidding for a campaign can be significant. Advertisers are more and more vigilant on the yield of their investments and sometimes solicit media auditing companies for monitoring agencies on their billing prices, at every step of the campaign.

According to professional sources, agencies have reduced their margins in the past ten years, particularly after the 2008 crisis. Agencies may also have reduced their costs by outsourcing part of the concrete production of advertisements (film production, design, etc.), or by trying to obtain better prices from media marketers, which are also heavily affected by economic variations.

Production processes can be long in the advertising industry. Money transfers from advertisers to agencies can occur at several steps of the campaigns, depending on the media placement chronology, on the accuracy of the anticipated cost of production of the advertising material, with possibilities of positive or negative balances.

- **Price method chosen**

INSEE "Field surveyors" visit the sample of firms to select price indicators (see 3.2) that can reflect their realizations, without being too complex, in order to be furnished quarterly. Since field surveyors choose the appropriate method according to the situation of the firm, we do not keep only one method and we draw up the report afterwards.

Five kinds of price methods are mostly used.

- Hourly or daily average rates by category of staff and category of activity of the advertiser, after negotiation. These rates seem, in many cases, to be the natural way for agencies to charge their services. It is very important to differentiate the rates, not only by category of staff, but also by category of activity of the advertiser, because it has a great influence on the price.

- Contract prices, when representative examples of contracts signed with advertisers can be identified and isolated and followed over time.

- Commission rate for media agency, if it is the way they charge their customers for the space buying. If the value of media bought is not provided by the agency, the percentage fee has to be adjusted upwards by an underlying index: INSEE uses indexes from the 73.12 industry (media representation).

  For traditional advertising, commission-based charges are becoming less and less frequent.
  In digital advertising, agencies may apply commissions to the following indicators: cost per thousand viewers/impressions (CPT/CPM), cost per click (CPC), cost per lead (CPL: submitted form with contact information or registration), cost per action (CPA: acquisition by a costumer). That type of performance indicators is now mandatory for reports to advertisers, so agencies can provide them in the SPPI survey without much difficulty.

  Commission rates or markup rates may also be applied by pharmaceutical representatives.

- For marketing activities, average prices per consumer can be followed. An example of transactions could be: "non-individualized advertising leaflets, distributed in mailboxes, average price for 1000 leaflets (shall be specified characteristics like: in urban/rural zones – for local authorities / public administration)”

- Model pricing (evaluation of fictitious contracts). This may be the last-chance method when others have failed. Such models are particularly difficult to define in this industry, because fixing all details of the project leads to unreasonably extended items in the questionnaire. Because they would be too complex in many cases, fictitious bills would also generate response burden, without any insurance that it would still mean anything relevant over time.

- **Description of index estimation procedure, including estimation of missing prices**

As said in 3.2, 7311 SPPI is estimated by aggregating directly service products indices.

When a price is missing, we will use two types of estimations:
- an estimation corresponding to the variation of the up-level in the aggregation tree
- a constant price estimation.

The first method is the default method. For instance, the second method is used when elementary series correspond to commission rates.

- Quality adjustment methods and sources of data quality if not obtained directly from respondents

Respondents are allowed to comment on their price variation, and a comment is requested in the Internet questionnaire when the variation is higher than 10%. Operators in Lyon SPPIs skill center are asked to call the respondents when the reason for a strong variation has to be explained. They can assign a “quality coefficient” to the price progression, or substitute the transaction with a new one if the quality gap is too marked. This is the main information tool for adjusting quality.

The main quality adjustment issue for advertising industries is audience size. Some services are clearly linked to audience size (e.g. “direct” marketing), some others do not seem to be (conception of a logo...), and some are ambiguous (“full service advertisement”).

Eurostat-OECD methodological guide for SPPI states that:
- “creative advertising activities are generally not quality adjusted”;
- “it is important to consider the differences that result from any legal obligation that the service producer has to its consumer. Where an agency charges its client purely for the service of purchasing the media space and where the fee is based on the numbers of hours worked, this fee is clearly not linked to the achieved audience size”.

Furthermore, as said in the Voorburg Group revisited sector paper (Pegler, Berger, Sulc, 2009), “even if media prices are collected to represent changes in the price of the service, this does not mean that audience affects the service offered by the agency.”

As a conclusion on audience size, the 7311 industry (agencies) is less concerned with audience adjustment than the 7312 (media representatives). We tend to follow these above-mentioned rules for the 7311 industry, and we adjust on audience size only services like “marketing”, when the price is a direct function of the number of consumers.

There are other quality effects in the industry than audience size. With contracts spanning several years, there may be quality effects because the qualitative content of the campaign is negotiated each year, even if the price is unchanged. Calls for tender also tend to limit (sometimes to eliminate) price increases due to quality efforts. Adjusting quality in these cases is a challenge, because the price series of the respondent may be constant, even if innovation or quality efforts are intense, so we have no clue that quality is improved.

- Frequency of collection and for which purposes

The SPPI survey is quarterly. Its main purpose is to deflate national accounts. In 2017, a monthly services production index was developed by Insee; SPPIs are also used for deflation of this index (see 3.1).

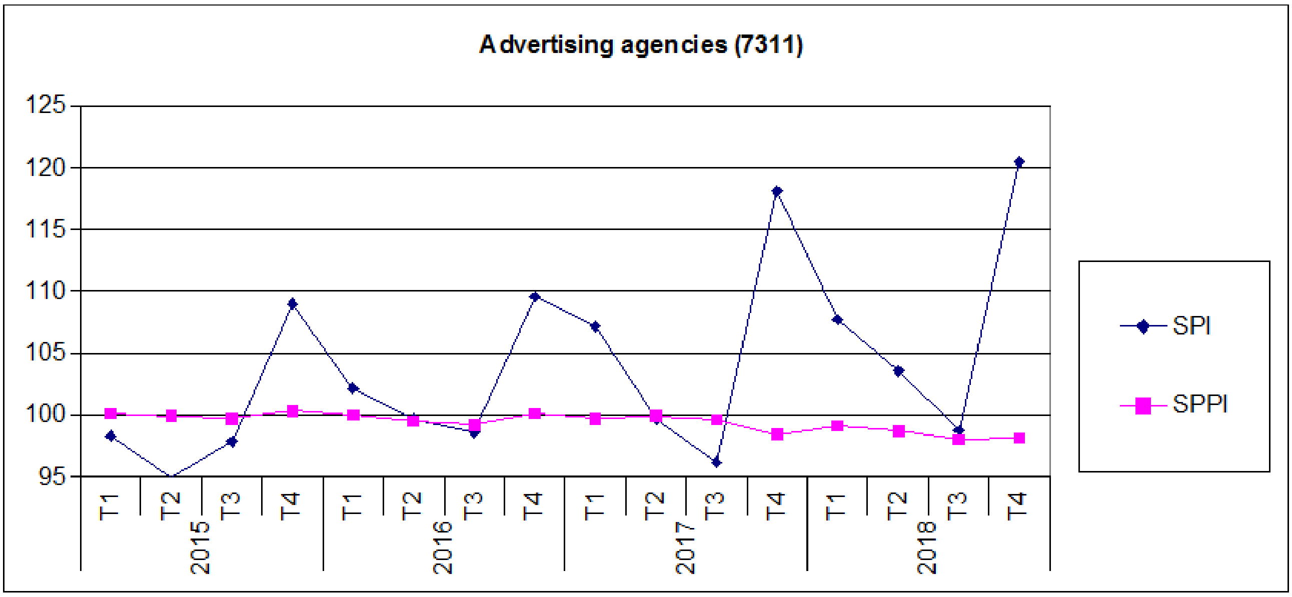
For some industries, SPPI may also be used by companies to escalate contracts. It seems that it is not the case for the 73.11 industry.

3.4 Evaluation of comparability of Price data with Output data

BtoAll advertising agencies SPPI is used as a deflator for advertising agencies services production index (SPI). Services Production indices are constructed from a tax source, the "CA3" form, which must be completed by enterprises for the payment of value added tax (VAT) every month.

Advertising agencies SPI (blue) is very seasonal, with a peak at the last quarter of each year. This quarter corresponds to the advertising and marketing expenses prior to the Christmas season. There is also a calendar effect: for accounting reasons, firms are encouraged to bill and recover their services before the end of the year.

In contrast, SPPI (pink) is very stable in the long run.



4. Evaluation of measurement

- Evaluation of methods (fitness for use)

As advertising campaigns generate significant amounts, the price charged by media agencies is often negotiated by advertisers. Taking this negotiation effect into account in the media agencies price series is always in our minds. It appears that agencies do not always have usable data in their accounting to suit our request to measure prices negotiated or discounted after contracts; these are frequent practices to retain advertisers.

For conception services, the price of creation services is quite subjective: our attention is brought to the variable characteristics of the concept.

- Summarize trade-offs between the measurement practices described in section 3 and the needs/concepts of the National Accounts (e.g. implicit price index)

Following Voorburg Group “Quality adjustment paper” (Pegler, Borstel, 2010):

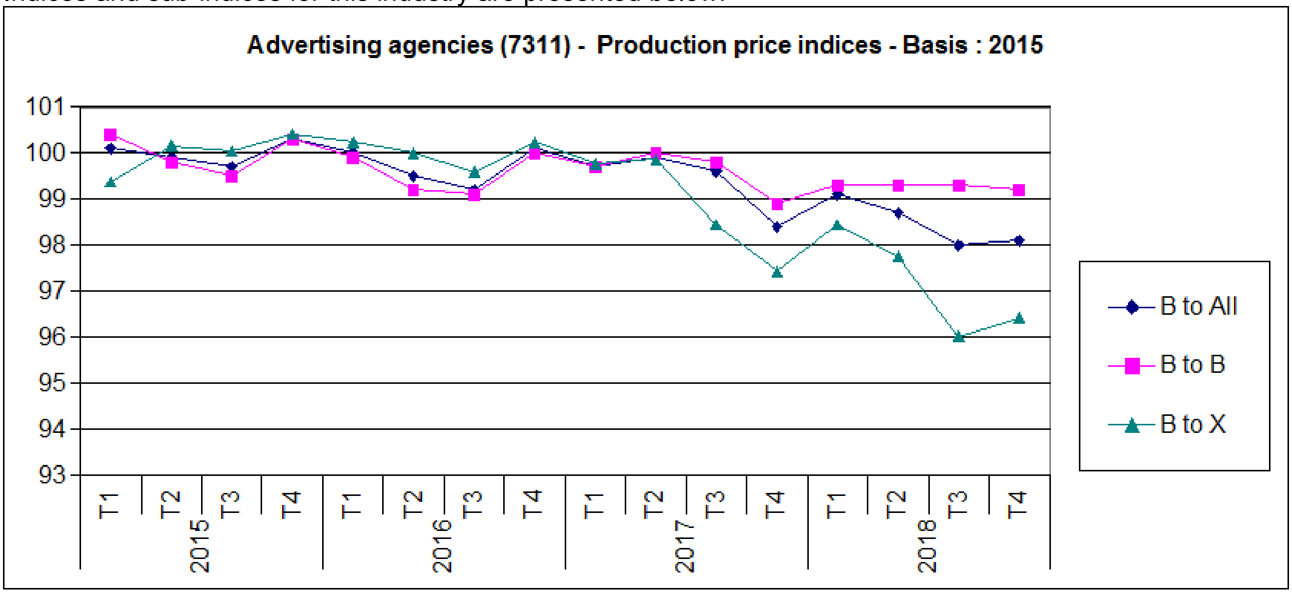
- "To ensure that a SPPI can be used as a suitable deflator in the national accounts, it is imperative that the billing method used is determined and matched to the turnover that is collected".

In France, the SPPI of the industry should be taken into account on a net basis, like the output from national accounts. We manage to collect prices on that net basis in our SPPI survey thanks to the initialization visits by field engineers-surveyors, who explain precisely to the respondent units that each kind of price chosen in their questionnaire has to be reported on a net basis.

- Lessons learned

We noticed that many price series tend to be flat, although we expected them to be seasonal. INSEE Field surveyors of our institute keep on working on this issue to ensure that the flatness of prices, fees or commissions correspond to the real market tendencies. Quality effects (quality increases despite unchanged prices) are not excluded, especially in contracts spanning several years, but they are difficult to identify on elementary price series.

Indices and sub-indices for this industry are presented below:

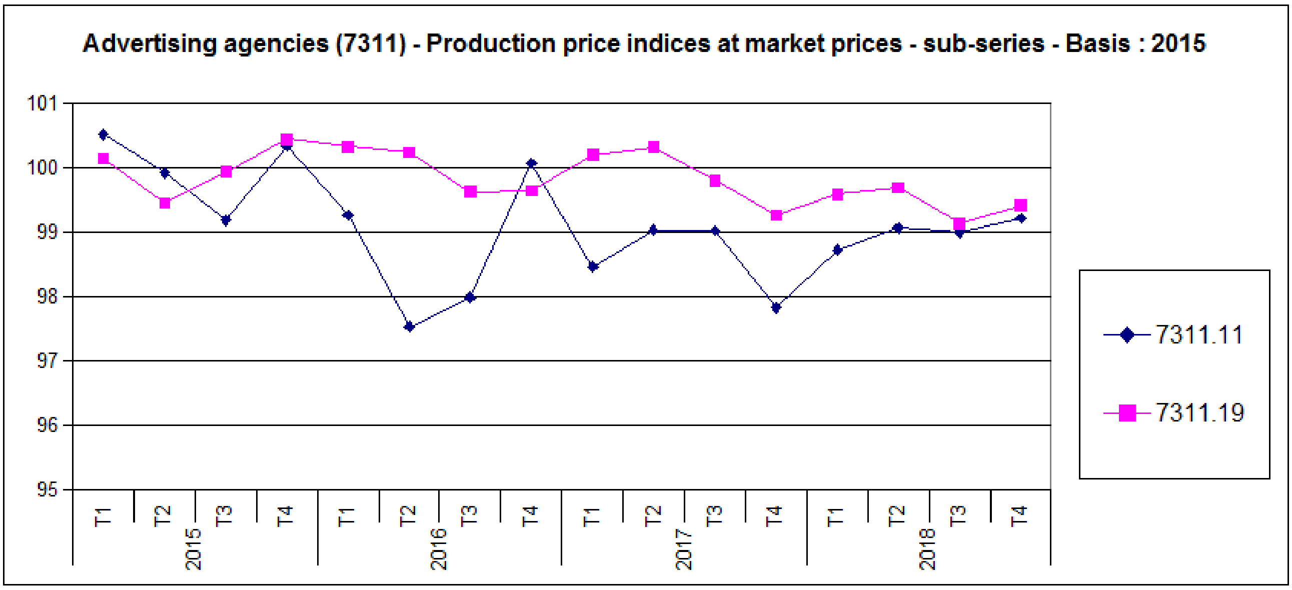


There are also sub-indices calculated and disseminated for this industry:

73.11.11 Full service advertising services
73.11.19 Other advertising services

But there are currently no sub-indices processed for the other CPA-6 codes, as no need has been expressed yet:

73.11.12 Direct marketing and direct mailing services
73.11.13 Advertising concept development services



- Future challenges and ways to meet them (classification issues, product developments, relevance of statistical methods used, etc.)

It seems that small-sized agencies, which are significant in output data, are not very present in our PPI survey because of the cut-off model used for sampling. This could perhaps lead to some bias in this case because small firms, more likely to specialize in creation, are much more affected by competitive pressure.

“Programmatic advertising” seems to be the most important measurement challenge, according both to the complexity of the business models and the weight it is about to reach. It encompasses several industries, advertising (7311/7312), publishing (58xx/6312), and IT services (62xx). This challenge has to do with classification (each product / unit in the relevant industry) and definition of pricing methods for each actor of the value chain.