

# **The 34<sup>th</sup> Voorburg Group Meeting**

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Mini-Presentation by

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**Advertising (ISIC 7310)**

## **Introduction**

The ICBS has published a price index for advertising services since 2012. Currently, the price index is only B2B, although export in the industry is significant (about a third of the total output).

The paper presents the advertising price index in Israel and information about the local advertising industry, as well as future challenges regarding the price index.

### **1. Descriptions and characteristics of the industry**

#### **1.1 Definition of the industry**

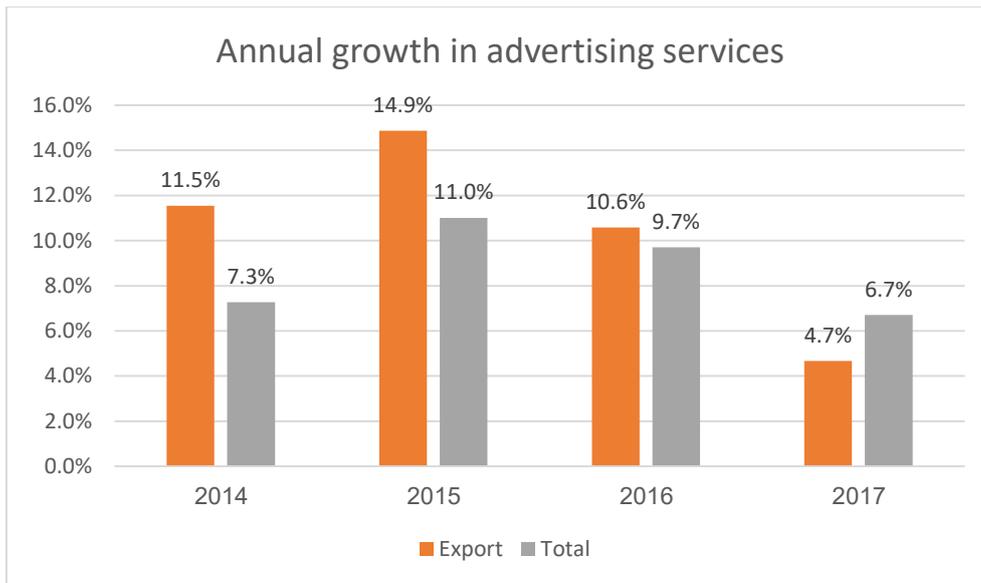
The advertising market in Israel includes two main groups of services:

1. Media representation services: the service of buying media space or time in the different types of media (television, digital, print, radio, billboards, and others).
2. Advertising services such as: consulting, planning ad campaigns, creative, and production of advertising material (excluding the production of commercial messages for television and radio).

These two main groups of services are provided mostly by two different types of companies: media buyers and advertising agencies. Although advertising agencies can purchase media space or time for themselves, most of the buying is done by companies specializing in that service.

#### **1.2 Market conditions and constraints**

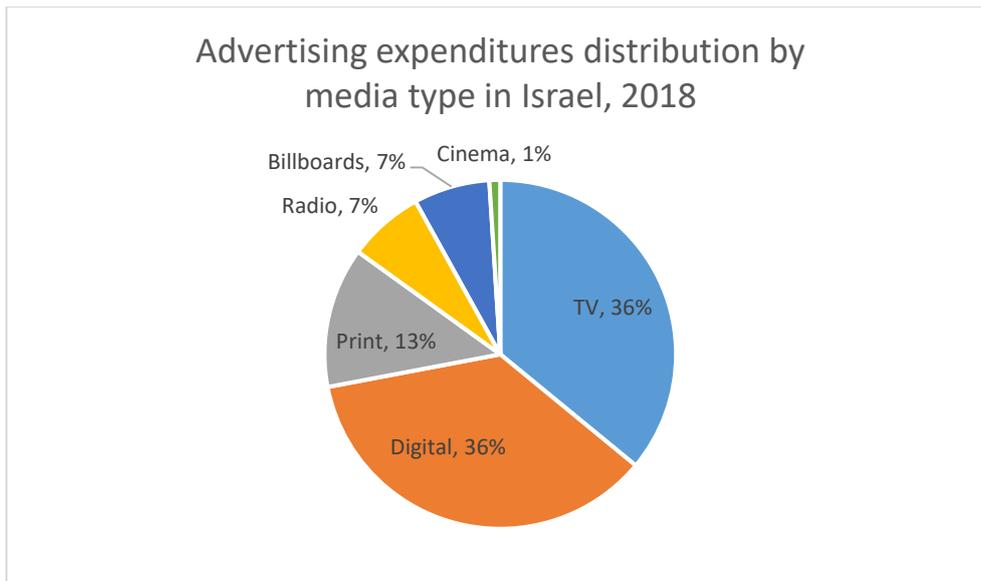
While most of the activity in the advertising market is B2B, there has been significant growth in the activity of digital advertising, which includes export of technology-driven advertising services. This service is provided through an online platform or an application where advertisers can plan and manage their digital ad campaigns.



The activity of media buyers who buy advertising time in television constitutes a very concentrated market. In Israel, five large companies buy almost all the advertising time in television,<sup>1</sup> which until 2017 was the largest media type in terms of local expenditures on advertising. In 2018, it had the same share as digital media, these being the two leading media types in terms of local expenditures on advertising. In digital media, the situation is different. In more recent years, global companies have begun to reach the advertisers directly, without any intermediary. Media buyers who buy media space or time in the more traditional channels also operate in the digital advertising market, and some companies specialize exclusively in the digital advertising field.

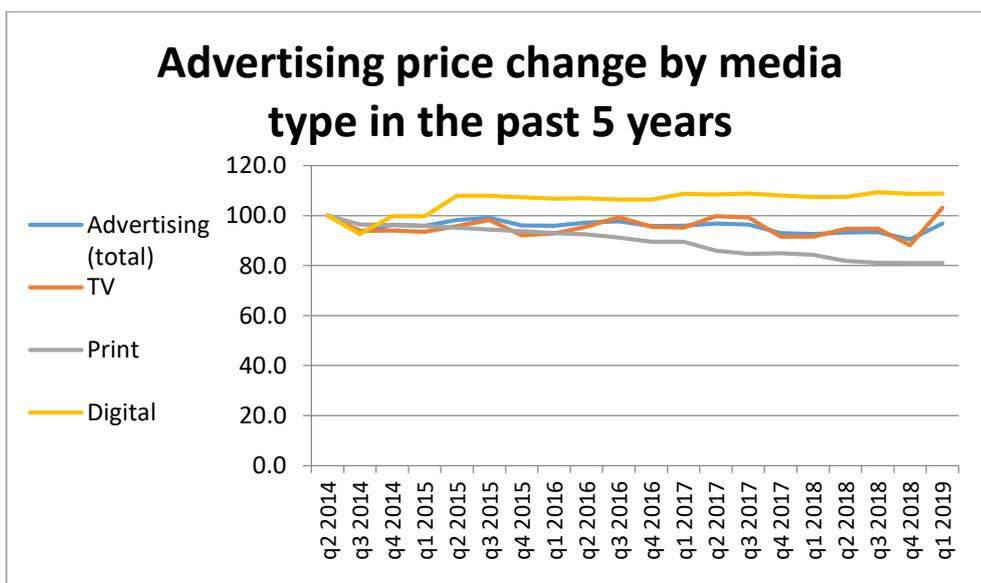
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<sup>1</sup> A report published in 2013 by the antitrust authority claimed that the five largest media buyers had an 80% share in the purchase of advertising time in television.



Concentration in the activity of advertising agencies is low. There are no entry barriers, and regulation supervises only the advertising materials. The Israeli Advertising Association (IAA), which numbers 40 member companies, claims that these account for about 80% of advertising sales in Israel.

Even though prices in digital media are increasing, as can be seen in the chart below, they are considered lower than in other media types. Digital advertising also involves large investments. As a result of these two factors, profitability is low. Still, digital advertising grew 12% in 2018, more than advertising in all other media types.<sup>2</sup>



<sup>2</sup> The growth in digital advertising is also explained by the growth of digital services in general, which eventually use digital advertising to sell their products.

### **1.3 Specific characteristics of the industry**

There are usually ownership relationships between advertising agencies and media buyers (excluding those who specialize in digital advertising). Media buyers who share ownership with advertising agencies buy media space or time for them as well as for other advertising agencies, and also directly for advertisers. There are cases of independent media buyers as well.

The largest advertising agencies in Israel are owned by international advertising corporations.

## **2. Measurement of SPPI**

### **2.1 General framework**

The ICBS has published a quarterly price index for advertising since 2012. The index is used primarily as a deflator for national accounts. The price index covers only B2B services, and does not include export of advertising services. We receive data on prices from advertising agencies for the bundled service that also includes the buying of media space or time.

### **2.2 Measurement issues**

Advertising agencies in Israel do not charge for their service using hourly rates, which is the common pricing method in other countries. Instead, they charge a commission on the price that advertisers pay for the media space or time. Typically, the commission is about 15%: less from larger clients and more from smaller ones. This is usually accomplished through discounts to clients. A less common pricing method, for smaller clients, is a retainer agreement (monthly payments). The client is included as one of the parameters of the price collected. This is important because it allows us to account for different prices charged to different clients.

We were advised by a market research firm we contracted during the development of the price index to collect prices for bundled services. These prices include the buying of the media space or time as well as the advertising services offered by advertising agencies such as creative and planning. Media buyers sometimes work on a cost plus basis, which makes it harder for them to report prices. It is easier for

advertising agencies to report prices for bundled services than to provide a price and a percentage fee. On the other hand, as a consequence, there is no separate measurement for the two main groups of services in advertising.

Weights for the price index represent the annual advertising sales broken down by media type. Data on gross sales (including buying media space or time), which were provided by the market research firm we contracted, were used to determine weights for the price index. Lower aggregation levels in the price index depend on the media type. In television advertising, the next aggregation level is broadcasting time, and the next one after that includes the different channels. In digital advertising, there are aggregations for the type of ad and the internet site it is displayed on. In radio and print there is only one additional aggregation level: the specific newspaper or radio station. The billboards category is divided into the different companies who sell them through advertising agencies.

The sample for the price survey includes the ten largest advertising agencies by sales.

### **2.3 Description of pricing methods**

For advertising services in all types of media, the bundled price (which, as mentioned, also includes media buying) is collected from advertising agencies. Advertising agencies report prices for their main clients. To assure confidentiality, each price observation includes a code (a letter) that represents the client.

Prices of repeated services are collected, but in a different manner for each type of media:

- Television: The price for one ratings point<sup>3</sup> for a spot (30 seconds) is measured during different broadcasting times (prime time, semi-prime, off-prime and late-night) and for different channels. There is seasonality in prices for advertising in television: Prices are higher in summer and lower in winter.

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<sup>3</sup> Each ratings point represents 1% of the households in Israel, measured through a representative survey of 900 households performed by a private company.

- Digital: The prices for different types of advertisements such as web banners (CPC, CPM) and video on various websites are collected from advertising agencies.
- Print: Respondents are asked to report the price for advertising in a specific ad placement (the left side before the middle of a newspaper or a magazine) in various newspapers and magazines.
- Radio: The price for a 30-second ad on national and local radio stations is collected from advertising agencies.
- Billboards: The prices of advertising packages with nationwide exposure are collected from advertising agencies.

As mentioned, all prices include the client in the parameters of the price collected.

#### **2.4 Quality adjustments**

As mentioned, advertising agencies' prices are not time based, but rather are commissions on the total price that includes the media buying. Also as mentioned, the total price is collected. As a consequence, quality adjustments are necessary when there is a change in the exposure of an advertisement. For example, when collecting the price of an ad in a newspaper which is getting less exposure over time, due to reduced sales or subscriptions, the price for the ad will drop. The price drop could also be due to a decrease in demand for newspaper advertising, but part of the drop in price is explained by a quality change, namely, an ad with less exposure.

Due to respondent burden, we do not collect data on exposure (sales or subscriptions) from respondents who report on prices in publishing. But when there is a significant change in the exposure of a newspaper, class mean imputation ("link to the cell relative") is used to measure price change in both advertising and publishing indices.

Television is less problematic because we measure the price of a ratings point. Less exposure means fewer ratings points, and thus the quality change does not affect the price of one ratings point.<sup>4</sup>

Another example of a quality change which is less common, but which in Israel happened twice in less than three years, is a merger or split of television broadcasting channels. If a broadcasting channel splits into two channels, we expect advertising prices to drop due to an increase in supply, but there is also a quality change (the creation of a new channel) that causes prices to drop, so the advertising prices in either one of the new channels cannot be compared to the previous prices. The demands for advertising in different channels are not equal and result in different prices for a rating point even if this is for ads in the same time of day. The different prices might be due to the effectiveness of an ad displayed in one channel as opposed to another. If an advertiser thinks that viewers of one of the channels will have a greater tendency to buy their products, the advertiser will be willing to pay more for the ad. An explicit quality adjustment is preferable in this case. One can estimate the change in price caused by the change in quality by evaluating price changes for ads in specific programs that continue to be broadcasted in either one of the channels after a split or on the new channel after a merger. If it is not possible to estimate the change in price caused by the quality change, then imputation, in this case changes in prices in other broadcasting channels during the same period, is performed.

In digital advertising, when there is a move from one pricing model to a different one, such as from CPM to CPC, the overlap method is used for quality adjustment.

### **3. Future challenges (SPPI)**

- Updating the price index more frequently so that changes in advertising services, such as the growth in digital advertising, will be expressed in the weights of the price index.

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<sup>4</sup> The only adjustment that must be made is when there is a significant change in the population, which means that 1% of households is not close in numbers to what it used to be.

- Reflecting changes in prices of exported digital advertising services, in the move from B2B to B2A. This will include measuring changes in prices of services that are different in the amount of technology involvement (e. g., programmatic advertising), and have different pricing models.
- Measuring advertising services such as creative and planning separately from media representation services.
- When collecting prices, taking into account new products, such as large screens and LED signs, which are becoming more popular in the billboards category.

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