Quality considerations in the zero-price economy – Note by Israel

28 November 2018

This document reproduces a written contribution from Israel submitted for item 2 of the joint meeting between the Competition Committee and the Committee on Consumer Policy on 28 November 2018.

More documentation related to this discussion can be found at:

Please contact Mr. Antonio Capobianco if you have any questions about this document
[E-mail: Antonio.Capobianco@oecd.org]

JT03439531
Executive Summary

1. The Israel Antitrust Authority (hereinafter: "the IAA") has dealt several times in the last few years with quality considerations in zero-price markets, or in markets where the price is set by the regulator, and parties compete on quality parameters. This contribution presents three of these cases.

2. The first case is a merger proposal between two media purchasing agencies. These companies operate in a multi-sided market, and this paper focuses on the segment between the broadcast television channels and the viewers, where the service provided is free of charge. It was argued that the merger would increase bargaining power of media purchasing agencies against TV channels, and the consequent advertisement price decrease would lead to a decrease in broadcast quality to viewers. Quality measures considered in this context are the amount of investment in content quality made by the channels; rating points; the amount of re-broadcast programs; and the amount of advertising.

3. The second example is the proposed merger between the operator of public bus lines and the operator of the rail train in the city of Jerusalem. In order to address the horizontal concern of the merger, it was important to determine whether bus and light rail are substitute products. Because the price of public transportation is defined by the regulator, the standard SSNIP test could not be used. Instead, the IAA based its analysis on expected changes in quality. The parameter chosen was the amount of time the light rail takes to reach its destination, i.e., its average speed, which enables calculating the cross-elasticity of demand between light rail and buses.

4. The third case is the proposed merger between the owners of two pumped-storage hydroelectricity (PSH) stations. Also in this case, the price paid to the operators was previously defined by the regulator, so the competition between the stations is expected to be reflected in aspects of the quality of service provided by them. Examples of quality measures are the response time of a PSH station to electricity demand, and the number of times a station is able to provide energy over a given period of time.

1. Introduction

5. The Israel Antitrust Authority (hereinafter: "the IAA") has dealt several times in the last few years with quality considerations in zero-price markets. Although this issue has recently gained increased attention in the context of digital sectors, it is not unique to the digital economy. The IAA has recently had recourse to non-price considerations in three cases in "traditional" industries, namely, television, public transportation and electric power. This document presents these cases, with special focus on quality measures used in their analysis. The first case deals with two-sided markets in which products are offered to one set of consumers free of charge. In the other two, the focus on quality elements arises from regulatory requirements that effectively set a given price. For analytical purposes, we consider such markets as similar to those with zero price, since competition in these markets is over quality.
2. Case 1: Two-Sided Market: Media purchasing agencies merger

6. In July 2018, the IAA opposed the horizontal merger between Union Media Israel Ltd. (hereinafter: "Union") and TMF Media Force L.P. (hereinafter: "TMF"), two media purchasing agencies. The merger raised significant competitive concerns regarding harm to advertisers, TV channels and viewers.

7. This matter involve multi-sided market with four main actors:

   1. **Advertisers** – Entities aiming to promote their products through the use of different media. For this purpose, advertisers typically communicate with media purchasing agencies.

   2. **Media purchasing agencies** – Are engaged in purchasing advertising space from various media companies (such as commercial television broadcasters) and selling them to advertisers. There are five main media purchasing agencies in Israel.

   3. **Media companies** – The channels which transmit advertisements to the public, including commercial television broadcasters, radio stations, etc. In general, it was found that broadcast television is the major media medium for advertisers, as it dominates the most significant share of the activity of media purchasing agencies, so the focus of the analysis was on broadcast TV channels. There are three main commercial TV channels,\(^1\) which are virtually free of charge for the public.\(^2\)

   4. **General public** – TV viewers, who enjoy TV programming and are exposed to advertisements during the broadcast and are the target audience for TV advertisers.

8. The IAA examined several issues regarding the merger, especially the balance of bargaining power between the channels and media purchasing agencies: assessing the changes in terms in this interaction is relatively straightforward and is measured as the price paid by the first to the second, i.e. the selling prices of advertising time measured in rating points. Because media purchasing agencies control the advertising budgets of their clients, they are able to partly shift demand for advertising between TV channels or even between different media mediums (such as digital, radio, etc.), which would harm the TV channels' revenues and comprises a source of bargaining power by media purchasing agencies in their negotiations with the channels. The concern was that further consolidation of media purchasing companies would increase this bargaining power.

9. However, what is relevant to the present paper is the effect of the merger on the relationship between the television channels and the viewers. There was a concern that if in fact advertising prices would decrease, that, in turn, would affect the broadcast quality for the viewers. The question that arises is: how to measure the effects of the merger regarding the other side of the multi-sided market, namely the relationship between TV channels and viewers, since the price there is zero?

10. One option is to measure the quality of TV content by the amount of investment in them by the channels. A decrease in the selling price of advertising time would reduce the incentives of the TV channels to invest in content demanded by the public in order to

---

\(^1\) A merger between two of the commercial television channels was recently approved by the IAA and is pending other regulatory approval.

\(^2\) These channels could be viewed on newer TV sets, while viewing them on older ones require the purchase of a digital converter, a one-time expense of approximately 50 USD.
increase ratings, therefore harming the quality of the broadcast for viewers in the immediate term and ultimately reducing the total rating of all channels combined.

11. A question that arose in this respect is whether rating points should be considered a proxy for the quality of the content. On the one hand, higher ratings, i.e. more viewership, is a measure of demand and generates higher revenue from advertising. On the other hand, one could argue that a more subjective measure should be used for quality, for instance experts' opinion, because more public appeal does not necessarily mean a high standard of production (e.g. some reality shows).

12. One indicator of quality could be the amount of re-broadcast content by a channel. The assumption is that the public prefers to watch different programs rather than reruns. It is worth noting that this measure is related to investment in quality, since re-broadcasting usually requires little or no investment. Similarly, it is possible to consider the quantity of original content versus purchased content, or national versus foreign programs, but analyzing these measures requires a deeper understanding of viewers' preferences, and these parameters do not necessarily directly translate into quality.

13. Another parameter of quality in the TV environment is the amount of advertising. From the point of view of the public, more advertisement in a given time period – instead of content – would be considered a reduction in quality. However, it should be taken into account that the ad revenues are the main factor that enables TV channels to invest and broadcast quality content to the viewers, so the relationship between the amount of advertising and consumer welfare might not be linear. Similarly, consumers may use various technologies (such as "time-shifting" or DVR technology) to avoid watching advertisements altogether, making the measurement of perceived quality as a function of advertising time difficult.

14. As of this point in time, the IAA decided to oppose the merger. While the IAA did not measure the exact impact of the merger on quality, the option that best served the IAA in this case between the presented parameters was addressing quality of TV content by the amount of investment in quality by the channels. One of the considerations in the opposition to the merger was the risk of harm to competition between the media purchasing companies and the TV channels, which in turn is expected to harm television viewers as well because it is expected to lead to lower quality content.

3. Case 2: Local Transport: Bus and Rail merger

15. In 2011, the IAA analyzed the proposed merger between Egged Holdings Ltd. (hereinafter: "Egged") and Connex Jerusalem Ltd. (hereinafter: "Connex"). Egged operates public transportation lines and is a declared monopoly in urban public transportation in the Jerusalem region. Connex is responsible for the operation and maintenance of the light rail in Jerusalem. Among several concerns the merger raised, the IAA analyzed the potential loss of horizontal competition between Egged bus lines and the light rail, which will be more fully explained below.

16. Public transportation in Israel is highly regulated. For instance the Ministry of Transportation decides on the price paid by travelers, the route of the lines and their frequency. When bidding in a tender, the companies compete on parameters such as the subsidy received by the government, drivers' wages, and increase in lines' frequencies above the minimum requirement.
17. In order to address the horizontal concern, it was important to determine whether bus and light rail are substitute products. If there is a high level of substitutability, it would raise a concern that Egged would discourage Jerusalem passengers from traveling on light rail in order to steer them to buses (if, for instance, the profit margin from bus lines is higher than from light rail), which is not a desirable outcome.

18. As a consequence of the regulatory framework, price is not a competition parameter when addressing substitutability between transportation means, since companies cannot modify it as they would in an unregulated market. Therefore, instead of the standard SSNIP test, which takes into account price changes, the IAA based its analysis on expected changes in quality.

19. The parameter chosen for quality in this merger was the amount of time in which the light rail reaches its destination, i.e., its average speed. If the light rail increases its speed, that is considered an improvement in efficiency and quality, and if it decreases speed it is considered a reduction in quality. It is worth noting that the agreement between the operators and the Ministry of Transportation sets minimum quality criteria, inter alia a strict timetable, and if the timetable is violated the operator suffers a monetary penalty.

20. The Ministry of Transportation has developed a model which simulates how certain parameters of a specific means of transportation – including speed – affect the use of the other means for a specific route. This model is based on a comprehensive survey on passengers' characteristics and their travel habits. The IAA made use of this model for the purpose of evaluating this merger.

21. Therefore it is possible to calculate a proxy for the cross elasticity of demand between light rail and buses, for example by estimating the rate of change of the number of travelers for each means of transportation when the speed of light rail improves or decreases. Similarly, another indicator of substitutability between the means of transportation is the diversion ratio, namely the share of travelers that divert to a specific mean of transportation out of the total diversion.

22. In light of the information above, it is possible to see how "elastic" travelers' preferences are, and the level of substitutability between the different means of transportation.

23. Regarding the 2011 proposed merger between Egged and Connex, it was found that relatively few people would shift from their current means of transportation either when the light rail speed increases or decreases, so Egged would have little incentive to harm the quality of the light rail service with the aim of moving their passengers to buses. If this were in fact done, Egged would be expected to benefit only marginally from the increase in ridership of their buses, since not many passengers would migrate to this form of transport, while it would suffer the penalties fixed by the agreement with the Ministry of Transportation for violating the quality of service parameters for the light rail service. This was one of the arguments of the IAA in approving the merger between the transportation companies.\(^3\)

---

\(^3\) In this case the deal was pending other regulatory approvals which were not granted; therefore despite the IAA's approval the merger was not carried out.
4. Case 3: Electric power: Pumped-storage hydroelectricity (PSH)

24. On December 2013, the IAA conditioned the entry of the Housing & Construction Holding Company Ltd. (hereinafter: "Housing & Construction") into a partnership with Electra Ltd. (hereinafter: "Electra") in a pumped-storage hydroelectricity (PSH) project on the divestiture of at least 80% of Electra's stake in the project. After the divestiture, Electra is to hold no more than 10% in the project. The divestiture's aim was to prevent cross ownership holdings among two out of three active PSH projects that raised a reasonable concern to harm competition in the market for selling electricity while using this technology.

25. The relevant market for this merger is PSH stations. PSH is a type of hydroelectric energy storage used by electric power systems for load balancing. The method stores energy in the form of gravitational potential energy of water, pumped from a lower elevation reservoir to a higher elevation one. Low-cost surplus off-peak electric power is typically used to run the pumps. During periods of high electrical demand, the stored water is released through turbines to produce electric power. PSH allows energy from other sources to be saved for periods of higher demand.

26. As of that time, although there were still no PSH station in Israel, three stations were expected to be built in sites with proper physical and topographical characteristics. Sector regulation determines that Israel Electric Corporation (ICC), a governmental company that is a monopoly in transmission and distribution of electricity in the country, is to pay a fixed amount for PSH stations on account of their availability, and a fixed charge for the consumption of each unit of electrical energy produced at a PSH station, which is predetermined and identical for all PSH stations.

27. Since the tariff to be paid to PSH stations for electricity generation is determined in advance by the regulator, the competition between the PSH stations is expected to be reflected in aspects of the quality of service provided by the stations. For example, the regulation in place creates an incentive to improve the station response time to electricity demand. Another example is the number of times a station is able to provide energy over a given period of time.

28. The advantage of these quality measures, besides being easily quantified, is the fact that they are based on parameters that were previously considered by the regulator itself. In order to get a license, a PSH station has to meet minimum standards of both reaction time to electricity demand and the number of possible "triggers" in a specific period, thus their importance is presumably high for the consumer segment (the ICC in this case).

29. Because the merger raised concerns about the use of unilateral market power, which may result in damage to various aspects of the quality of services provided by the PSH stations, the IAA conditioned its approval.