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## DIRECTORATE FOR FINANCIAL AND ENTERPRISE AFFAIRS COMPETITION COMMITTEE

#### ROUNDTABLE ON MARKET DEFINITION

-- Note by the Delegation of Chile --

This note is submitted by the delegation of Chile to the Competition Committee FOR DISCUSSION at its forthcoming meeting to be held on 13-14 June 2012.

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#### ROUNDTABLE ON MARKET DEFINITION

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#### Introduction

1. This contribution addresses the methodologies used by Chilean competition authorities in order to assess the likeliness of anticompetitive effects of unilateral conducts and mergers. The first section describes the legal framework imposing the duty to assess such effects. The second will address the way in which the National Economic Prosecutor (Fiscalía Nacional Económica, hereinafter "FNE") and the Competition Tribunal (Tribunal de Defensa de la Libre Competencia, hereinafter "TDLC") assess relevant markets using a standard approach. The third section discusses the difficulties that certain market conditions present to the standard approach (differentiated products, two-sided markets, industries with important R&D) and the theoretical solutions presented in the economic literature. The fourth, summarizes some of the cases where these difficulties have been addressed by the TDLC, and explains the methodology used to deal with them. Finally, we present some conclusions.

# 1. The need to assess current or likely effects on competition of unilateral conducts and mergers under Chilean competition law framework

- 2. Chilean Competition Law does not require competition authorities to define a relevant market, nor specifies a way or methodology to delimitate it. However, this analysis is always done in practice in order to find whether a unilateral conduct or a merger might be considered to be an infringement to competition law, or to set the conditions that the parties of a merger will have to accomplish for it to be regarded in accordance to it.
- 3. In Chile, any deed, act or contract might be regarded as an infringement to competition law only if it prevents, restricts or hinders free competition, or tends to produce such effects.
- 4. In fact, Article 3° of the Chilean Competition Law gives the legal description of a competition law infringement. It provides that, "Any person who enters into or executes, whether individually or collectively, any deed, act or contract that prevents, restricts or hinders free competition, or tends to produce such effects, will be subject to the measures prescribed by article 26 of this law, notwithstanding other corrective or restrictive measures that may be imposed in each case" (Subsection 1).
- 5. Thus, only when current or likely effects on competition are established, a deed, act or contract might be prevented, corrected or punished by the TDLC in accordance to Chilean Competition Law. A definition of the relevant market is then needed to ascertain market power and determine such effects.

### 2. Market definition according to Chilean competition authorities (the standard approach)

6. Market definition identifies the relevant market in which firms could effectively exercise market power if they were able to coordinate in their actions. This concept has been widely used as a test for assessing the consequences of specific actions or market configurations, asking whether a hypothetical profit-maximizing monopolist could impose a small -but significant and non-transitory- increase in price

(what is usually known as the SSNIP test), assuming that the prices of all other products are held constant. The relevant market will then correspond to the group of products and geographic area that are no bigger than necessary to satisfy this test.

#### 2.1 FNE standard approach

- 7. Though there are some attempts to use quantifiable indicators for the definition of the relevant market, in general it is qualitative information that is mostly used for this exercise. This information stems from interviews with the involved parties and other stakeholders of the sector (competitors, consumers groups, regulatory agencies, etc.). The interviews try to define whether there are product or market characteristics that differentiate one product from another.
- 8. Qualitative data depend on the specific market but can be summed to product characteristics, uses, modes of commercialization, consumer preferences etc. Another factor taken into account is international case law.
- 9. When good quality, disaggregated, data is available, quantitative techniques are used in order to closely define the market. The most commonly used quantitative approach is to estimate the own and cross elasticities for products that are seemingly similar and in order to decide whether it is possible to reject the hypothesis that these products are substitutes.
- 10. The first step of the process consists in applying the price test for the relevant market definition which is known as the "Granger Causality test". This test establishes if the variability in the current price of certain product/region is explained by current and/or past prices of another product/region. If the current and/or past value prices affect those in the product/region under examination, it should provide statistical evidence consistent with a wider relevant market from the product or geographical perspective. Given that this is so, the system of demand equations is estimated and consequently own and cross elasticities can be estimated. Own and cross elasticities can provide the first indication of how a product behaves given an increase in the price of another.
- 11. The final step of the process is the analysis of critical loss which estimates whether it is profitable for a hypothetical monopolist to increase the price of one product by 5%. The critical loss is estimated as the demanded quantity that the hypothetical monopolist would be willing to sacrifice such that their benefit would equal the benefits obtained before the increase in prices. The result is compared to the real loss in the market (using the elasticities calculated in earlier stages) due to the same 5% increase in the price of the product. If the critical loss is below the real loss it is assumed that there is competitive pressure in the market that would deter an increase in pricesand then both product/region are in the same relevant market.
- 12. This process has been used recently in merger cases reviewed by the FNE in the markets of meat products, dairy products and canned fish.

### 2.2 TDLC standard approach

13. When defining the relevant market, the standard practice in the TDLC is to begin by studying the existence of close substitutes, and assessing quantitatively and/or qualitatively the existence of market power, using the SSNIP test. Once this market has been established, the TDLC analyzes market shares (in sales measured both by units and by value), and the geographical extension of competition. It is very uncommon to have available data to estimate demand or cross price elasticities, therefore the TDLC usually relies on qualitative analysis, and/or in data obtained from other sources, such as consumer polls or aggregate data from the national statistics agency.

## 3. Difficulties presented by certain market conditions and solutions proposed in the literature.

- 14. Despite the fact that the established approach in merger reviews has been to use the market definition, in practice, this concept has turned to be inaccurate in certain contexts. There are many markets in which the conclusions drawn from this approach may be inappropriate, and in consequence there is a possibility that they lead to wrong antitrust decisions. These cases have been widely discussed in the antitrust literature: markets with differentiated products, two sided markets, and sectors with important R&D activity and vertical settings.
- 15. In the case of markets with **differentiated products**, there are two main problems that arise when using the standard market definition approach. The first one comes from the fact that defining the relevant market involves a dichotomy between products that are "inside" the market or "outside" the market. This definition turns to be very inappropriate in markets where there is a continuum of products with different degrees of substitution between them rather than a clear line delimitating the market. The second one refers to how appropriate the SSNIP is to assess the anticompetitive incentives that a firm faces in the case of a merger: while market concentration in the relevant market may be a reasonable approach for looking at the coordinated effects, it may not reflect the change in the incentives that rise due to unilateral effects. In differentiated products markets this last effect turns to be very important.
- 16. Farrell and Shapiro (2010)¹ proposed the Upward Pricing Pressure Index (UPPI)² as a solution to the lack of an appropriate simple and reliable index for the first step of the mergers review in the case of differentiated products. This index is based on a solid microeconomic background, putting special emphasis on the changes in the incentives that a firm faces when it acquires another one as the result of a merging process. There are two main forces considered in this approach that capture the essential aspects of the problem. On the one side, there is an incentive for rising prices due to the elimination of competition between the merging firms. On the other side, there is an incentive to lower prices because of the reductions on marginal costs derived from the cost synergies between the merged parties. Which of these forces turns to be stronger will determine whether the merger generates upward pricing pressure or not.
- 17. While this methodology appears to be an excellent solution in theory, in practice its use is limited due to important data requirements for computing the index -diversion ratios, margins and estimated cost efficiencies-, usually not available for antitrust agencies.
- 18. Problems may also arise with the market definition approach in **two-sided markets.** This is the case in which firms work as a platform of interaction between two different groups of customers. That is why there are two sides in these markets, so there is more than one price that a hypothetical monopolist might increase. Under the market definition approach, the two-sided market firm would have market power if it can raise prices above the competitive level in a significant and permanent way. But in these cases the complexity of pricing strategies in some two-sided markets makes it difficult to predict which will be the anticompetitive effects that may arise from a merger. A merger can increase market power at both, one or no sides of the market at all and, as a consequence, there is a large number of different pricing strategies. This makes the SSNIP an unclear and inaccurate tool for estimating market power.
- 19. In this case an alternative approach is to predict how a merger will impact transaction volume. The idea behind this approach is a result seen in many economic models of two sided markets: when the two-sided firm rises the price level (understood as the sum of the prices at each side of the market), the

Joseph Farrell and Carl Shapiro (2010) "Antitrust Evaluation of Horizontal Mergers: An Economic Alternative to Market Definition", The B.E. Journal of Theoretical Economics: Vol. 10: Iss. 1 (Policies perspectives), Article 9.

In addition to the Advanced UPPI and the GUPPI.

volume of interactions will decrease, independently of the composition of the rise of the price level (for example, the price level increase may be due to an increase in both prices or by an increase in one side that offsets the decrease in the other side). This makes the impact on transaction volume a good alternative to look at instead of the price-based SSNIP in the context of the complex pricing strategies in two-sided markets.

- 20. Another context in which the market definition approach may not be appropriate is in the case of markets with strong **competition oninnovation** -that is, markets with important R&D activity-. In this case a merger can affect not only the price variable but also other dimensions of competition, like the innovation incentives. This makes the price-focused SSNIP an insufficient test, as it does not take into account factors different from price.
- 21. Farrell and Shapiro proposed a solution for incorporating additional dimensions of competition when studying a merger in these particular markets. The idea is to take an approach similar to the one taken in the UPPI, but focused on the innovation incentives rather than the upward pricing pressure. For doing so they use an "innovation diversion ratio", that measures the "extra gross profits earned by firm A when it devotes more resources to innovation that come at the expense of firm B". If this number turns to be big when compared with some standard level of R&D efficiencies, the merger will "tend to retard innovation of firm A's products". Still, this solution may not be as useful in practice: establishing a standard level of R&D might be arbitrary and the estimation of innovation diversion ratios may be very imprecise.

# 4. Summary of the cases where the TDLC/FNEhaveaddressed the above mentioned difficulties and methodology used to deal with them.

22. In certain cases, the TDLC and the FNE have not been able to apply the traditional relevant market approach, mainly because of uncertainty regarding the extent of the market itself. To tackle this problem, different solutions have been applied.

## 4.1 Difficulties establishing the limit of the relevant market

23. There are some cases where there is no real need to define the market, mainly because no matter how narrowly or broadly defined, the result remains unchanged. One example is Decision #60/2007 of the TDLC, a case of unilateral conduct involving two pharmaceutical companies, regarding a specific product. Since the TDLC did not have enough information to distinguish if this product was a pain reliever or a cough medicine, three possible scenarios were analyzed: a relevant market comprised only of pain relievers, a relevant market comprised only of cough medicines, and a relevant market that included both pain relievers and cough medicines. In this case, the TDLC found that the defendant did not have market power in any one of these relevant markets, nor could gain market power through the accused conducts. The TDLC's conclusion was independent of the extent of the relevant market, making its definition not necessary to decide the case at last. The TDLC used the same criteria in Decision # 59/2007, which also solved a case regarding specific pharmaceutical products.

Joseph Farrell and Carl Shapiro (2010) "Antitrust Evaluation of Horizontal Mergers: An Economic Alternative to Market Definition", The B.E. Journal of Theoretical Economics: Vol. 10: Iss. 1 (Policies perspectives), Article 9.

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## 4.2 Differentiated products

- 24. When the products within the relevant market are differentiated, the HHI will not necessarily be a reliable predictor of the unilateral risks arising from the merger. In those cases the FNE/TDLC needs to assess the level of substitution between the products sold by the merging parties.
- 25. In order to evaluate the level of substitution between the products sold by the merging parties, and thus assess the extent of direct competition between them, the FNE in its assessment has commissioned surveys in order to measure consumer preferences. Also, the FNE has used econometric models to estimate the possible price increases arising from a merger, using "natural experiments", such as the exit of a firm from the market due to the earthquake of 2010, comparisons of prices charged in geographic markets where the firms compete against the prices charged in those geographic markets where they do not compete, and assessment of how prices change in markets with a similar HHI or a similar number of significant competitors.
- 26. Moreover, in its Decision # 80/2009, the TDLC analyzed a case regarding highly differentiated products -distribution of training sneakers-. In this case, the TDLC decided to separatetwo markets: the market of casual footwear –with plenty of substitutes-, and the market for sports footwear, where technology and specificity of the product take an essential place. The first market had plenty of substitutes, and the TDLC concluded that there was no evidence of market power. However, given the specificity of the products in the sports footwear market –especially in "high technology" premium sports footwear—, the TDLC concluded that the defendant had market power that could be abused, despite low market shares in this specific sub-market.

#### 4.3 Two-sided markets

- 27. In Decision #29/2005, the TDLC studied a case regarding Transbank, the bank-owned technological platform used in Chile for credit and debit card transaction processing. The TDLC identified this as a two-sided market, taking this characteristic into account when analyzing its pricing structure. Given the lack of numerical data regarding competition between credit cards and other payment methods (such as checks, cash or department store cards), the TDLC first presented an extensive qualitative analysis of the substitutability of these payment methods, in order to define a relevant market of credit and debit card transactions, where it was established that Transbank had market power. Then, it analyzed the available pricing and payments information, always taking into account the fact that this was a two-sided market. This decision concluded that there was no proof of abuse of a dominant position by the defendant, considering, among other things, the fact that two-sided markets do not have a unique clear-cut competitive pricing system. Therefore, the two-sided market condition made it difficult to find an abuse in such market.
- 28. In Decision # 89/2009 the TDLC studied a case where a newspaper accused the Chilean Government of systematically preferring other newspapers when hiring advertising space for its announcements. The Tribunal defined the relevant market as the market of written press, taking into account the fact that it is a two-sided market, in which positive demand externalities are present between the two sides of the market. Taking into account the fact that the newspapers with higher circulation are those that allow the Government to reach the highest number of people at the lowest cost, the Government's decision of hiring advertising space in those newspapers was deemed as an economically sound decision by the TDLC, therefore dismissing the lawsuit.

### 4.4 Prospective assessment of the market

- 29. Both the TDLC and the FNE take into consideration expected changes in the market when assessing a merger or an abuse of dominance. The following decisions from the TDLC exemplify the aforementioned.
- 30. 1. Resolution #1/2004 studied the proposed merger between Metrópolis Intercom and VTR, two cable television, internet and fixed telephony providers. In this case, even though the two merging parties possessed a joint market share of over 90% in the cable television market, the TDLC analyzed the market structure in a prospective basis. Even though important price differences made paid satellite television an imperfect substitute for cable television, the TDLC considered that those price differences would decrease in time. Moreover, since there were no barriers to entry to the provision of paid satellite TV, and considering other future potential substitutes, such as digital TV, for example, the TDLC approved the merger, imposing only short-term conduct remedies.
- 31. 2. Lastly, Resolution # 24 of the TDLC reviewed the proposed merger between D&S (a supermarket chain who also had a closed credit card and "power centres") and Falabella (a conglomerate who owned department stores, supermarkets, home improvement stores, shopping malls, power centres, and a closed credit card). In this particular case, the TDLC considered appropriate to define a relevant market for "integrated retail": companies who control supermarkets, department stores, home improvement stores, closed credit cards, development of complementary real-estate projects, as well as several related services (such as insurance, travel agencies, moving services, among others), with highly personalized loyalty programs. When analysing the proposed merger under the "integrated retail" approach, the TDLC found several coordination risks, given that the merger would have generated a duopoly with high barriers to entry –to the integrated retail business model—, therefore deciding to block the merger.

#### 5. Conclusions

32. In Chile, competition law does not require competition authorities to define a relevant market when justifying its decisions. However, they define it in order to identify whether the analyzed unilateral conducts —or mergers—restrict, hinder or prevent free competition or not. Normally, competition authorities conduct an analysis based on the idea of the SSNIP test. However, due to data availability restrictions, usually the analysis has an important qualitative component. Because of this restriction, the new methodologies described in this document are not easily applicable in Chilean antitrust analysis.

A group of convenience stores built around a supermarket, home improvement store or minor department store.