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**LATIN AMERICAN AND CARIBBEAN COMPETITION FORUM**

**Session I: Cartels: Estimation of Harm in Public Enforcement Actions**

**-- Contribution from Colombia --**

**4-5 April 2017, Managua, Nicaragua**

*The attached document from Colombia is circulated to the Latin American and Caribbean Competition Forum FOR DISCUSSION under Session I at its forthcoming meeting to be held on 4-5 April 2017 in Nicaragua.*

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# LATIN AMERICAN AND CARIBBEAN COMPETITION FORUM



**15th Latin American and Caribbean Competition Forum**  
**4-5 APRIL 2017, Managua, Nicaragua**

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## **Session I: Cartels: Estimation of Harm in Public Enforcement Actions**

### **CONTRIBUTION OF COLOMBIA ON CARTELS: ESTIMATION OF HARM IN PUBLIC ENFORCEMENT ACTIONS**

#### **-- CONTRIBUTION OF COLOMBIA --**

1. The general regime for the protection of competition in Colombia prohibits any agreements that, in their purpose or their effect, are contrary to free competition. In Colombia, articles 25 and 26 of Law 1340 of 2009 established the disciplinary regime used by the Superintendency of Industry and Commerce (SIC), as the national competition authority, for violations of the provisions on the protection of free economic competition. With respect to the fines for which legal persons are liable, Colombian law establishes a penalty ceiling equal to the greater of 100,000 minimum monthly wages at the prevailing legal rate (approximately USD 23 million), or 150% of the profits derived through the conduct of the offender, when this can be determined. In addition, it stipulates that for purposes of determining the fine the market impact and the benefit obtained from the offender will be taken into account, among other criteria.
2. For the year 2016 the SIC, in its penalty decisions, considered the theoretical estimation of the potential harm of business cartels in three cases involving mass consumption products as a tool for appreciating the severity of the behaviour, regardless of whether the cartel was found to be a violation of the competition regime per se. Thus, the SIC adopts the viewpoint that economists such as Van Dijk and Verboven (2008)<sup>1</sup> have taken, recognising that the quantification of the damage occasioned by the conduct can be an important input into the final decision of the Competition Authority, as it serves to illustrate the harm caused to the market.
3. In the process of theoretical identification of the potential harm of the conduct, the first element that the SIC considers is the determination of the counterfactual scenario. Thus, the authority identifies what would have happened in a hypothetical case where there was no such conduct. For this purpose, it must identify which agents were the injured parties and which economic variables were affected by the violation. It is important to recognise that, in the process of defining the counterfactual scenario, the

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<sup>1</sup> Theon van Dijk & Frank Verboven, Quantification of Damages, in 3 ISSUES IN COMPETITION LAW AND POLICY 2331 (ABA Section of Antitrust Law 2008).

benchmark does not have to represent a situation of perfect competition: it is enough to recognise the situation that would have existed in the absence of the anticompetitive conduct.

4. The next step is to analyse the behavioural dynamics of the agents presumably affected and, to this end, to define as fully as possible the characteristics that identify them in the market. With this information in hand, the impact generated in terms of welfare can be quantified.

5. In particular, the SIC conducts an economic analysis to identify any potential surcharge that Colombian consumers may have paid as a result of cartelistic behaviour. For the purposes of illustrating this analysis, we present an example of the estimation of potential harm in the case of the notebook cartel punished by Resolution 54403 of 2016.

6. In this particular case, the SIC recognised that the main variable affected was the unit price of products, which could be affected by competitors adopting common price lists for the various categories of notebooks, mutually agreed restrictions on supply, and specific promotions to distributors, among other standardised strategies used by the cartel members.

7. The SIC took as reference the OECD report, "Hard-Core Cartels: Recent Progress and Challenges Ahead, 2003", which presents a list of 38 relevant cartels detected by different competition authorities around the world, with estimates of the percentage price increase in each case. That document shows that the price paid by consumers as a result of the cartel was typically between 10% and 30% higher than they would pay in the absence of the cartel. In addition, the SIC found that these percentages coincided with the measurements made in various widely known academic studies.<sup>2</sup>

8. Taking as its basis the economic evidence mentioned above, the theoretical exercise performed by the SIC involved an estimation of the surcharge on notebooks as a result of the cartel, taking as reference two relatively conservative scenarios with overcharge intervals between 10% and 30%.

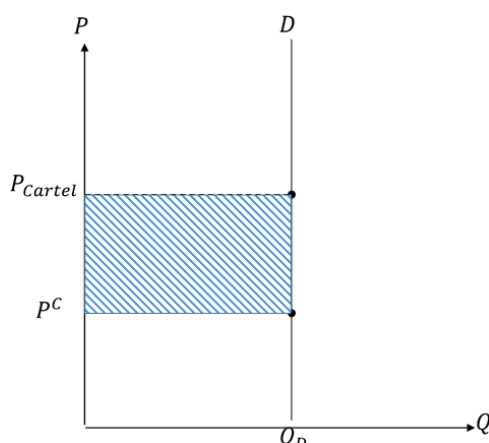
9. It should be noted that the overcharge interval indicated above has been used by the SIC in similar exercises concerning the impact on consumer welfare caused by business cartels in such markets as those for diapers and toilet paper.

10. Subsequently, the SIC assumed that the demand for notebooks on the Colombian market was totally inelastic. This means that, in the notebook sector as a whole, regardless of the price of the notebooks, consumers will buy the good because it is an essential item for them. That assumption is valid in this case, as notebooks are considered a necessary input for the pursuit of educational activities, and moreover, according to the National Administrative Department of Statistics (DANE), they are included in the basic consumer basket in Colombia.

11. For the theoretical estimation of harm, the SIC examined the transfer of welfare from consumers to the cartel members in light of the counterfactual scenario in which notebook prices were lower by 10% and 30% than those prevailing on the market, as illustrated in the following graph:

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<sup>2</sup> John M. Connor & Robert H. Lande, Cartel Overcharges and Optimal Cartel Fines, ABA Section of Antitrust Law, 2008; Gregory J. Werden, The Effect of Antitrust Policy on Consumer Welfare: What Crandall and Winston Overlook U.S. Dep't of Justice Antitrust Division, 2003; Richard A. Posner, Antitrust Law, University of Chicago Press, 2001; Margaret C. Levenstein & Valerie Y. Suslow, What Determines Cartel Success? University of Michigan Business School, 2002.



12. The transfer of welfare from consumers to cartel members for each year is calculated as follows:

$$Transfer_t = (p_t^{cartel} - p_t^c) * Q_t^d$$

13. Where  $t$  corresponds to each year in which the cartel existed,  $P^{Cartel}$  represents the average price charged by the cartel members per notebook,  $P^c$  is the hypothetical average price that would prevail if there were no cartel (equal to prices without cartel-induced increases of 10% and 30% respectively in each scenario) and  $Q^d$  is the quantity of notebooks sold on the market by cartel members.

14. The period covered in the exercise corresponded to the years 2001 to 2014, during which the cartel was confirmed to exist. In this case, the SIC concluded that, in the case where the cartel is presumed to have boosted prices by 10%, the surcharge borne by consumers totalled 217 billion pesos (USD 72.9 million) for the period analysed. In the case where the price increase resulting from the cartel was 30%, the respective overcharge to households amounted to 551 billion pesos (USD 185.1 million). In other words, the SIC recognised that the potential harm to consumers caused by the cartel over a period of 14 years stood at between USD 72.9 million and USD 185.1 million.

15. In presenting these results for purposes of recognising the estimated magnitude, the SIC compares the over-pricing with macro and socioeconomic variables related to the product affected by the cartel. In the case of the notebook cartel, it was found that, as notebooks account for 0.12% of Colombian household budgets for the purchase of products in the basic basket, families would spend 0.068% of their basic basket on the purchase of notebooks produced by the cartel members.

16. Thus, if this spending were distorted artificially with a notebook price increase of between 10% and 30% compared to a no-cartel scenario, this would equal up to 15.7% of total household spending on other school supplies, and 2.8% of the proportion of expenditure earmarked for school textbooks. In other words, households would reallocate their expenditure, and would withhold considerable amounts of funds that they could have used for the purchase of other school supplies and textbooks that are equally important in the educational process.

17. Moreover, the SIC considered that the severity of the cartel's impact was even greater in that its effects fell primarily on low-income households. According to the DANE, in 2014 there were 7,835,452 households<sup>3</sup> with at least one member pursuing studies, and 72% of those households – more than 5.7 million households – belonged to the three lowest income strata.<sup>4</sup> Thus it was estimated that, thanks to overcharging by the cartel during the 14 years of its existence, the price paid by each Colombian household with inelastic demand for notebooks was higher by between 1.3 and 3.4 days' minimum wage (2014 rates) than they should have had to pay for the purchase of the product in question.

18. In addition, the estimated figure for the surcharge associated with the notebook price cartel was the equivalent of between 4,800 and 12,200 dwellings<sup>5</sup> that would have been available to Colombian families in the absence of the cartel.

19. An alternative way of assessing the potential effect of cartel behaviour in the example considered here is to contrast the technical estimate presented above with the statistics in the Management Report of the *Instituto Colombiano de Créditos Educativos y Estudios Técnicos en el Exterior* – ICETEX ("Colombian Institute of Educational Loans and Technical Studies Abroad"), an important entity in the Colombian education sector. For 2015, the total value of loans granted for pre-graduate and postgraduate studies in Colombia and for study abroad was 335.890 million pesos, while the overcharging resulting from the cartel was 1.6 times that amount. This means that, if it were not for the cartel, greater numbers of Colombian households could have reallocated their budgets to finance their higher education studies. This is even more significant when it is recognised that, in 2015, 95% of approved loans were for students belonging to the lowest three income strata.<sup>6</sup>

20. Lastly, it should be noted that the exercise described above was not used by the SIC in calculating the penalty, given the inherent limitations of the method selected and the assumptions on which the exercise was based.

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<sup>3</sup> The total number of Colombian households in 2014 was 13,763,148.

<sup>4</sup> Encuesta de Calidad de Vida (Quality-Of-Life Survey) DANE, 2014.

<sup>5</sup> This value was calculated on the basis of the national government's free housing programme, in which the value of a dwelling is 45 million pesos.

<sup>6</sup> According to the 2015 Management Report of ICETEX, 31% of approved loans went to students in stratum 1, 43% to students in stratum 2, and 21% to students in stratum 3.