

CANADIAN COMPETITION RECORD

THE FIRST SECTION**COMPETITION TRIBUNAL'S REDETERMINATION DECISION
IN *SUPERIOR PROPANE*:
CONTINUED LESSONS ON THE VALUE OF THE TOTAL SURPLUS STANDARD**

By: Margaret Sanderson
Charles River Associates, Toronto

As the facts of *Superior Propane* are discussed elsewhere,¹ this note focuses solely on the efficiency trade-off debate arising from the most recent Competition Tribunal redetermination decision.² While there are undoubtedly many explanations for the Commissioner's decision to abandon the total surplus standard as it is articulated in the *Merger Enforcement Guidelines* when arguing the case before the Tribunal in the original hearing, the Decision underscores the tragic consequences of this decision. In fact, the Tribunal notes that had the Commissioner properly argued the total surplus standard in the first instance, the Tribunal might have reached a different conclusion in respect of allowing the transaction to proceed. Instead, having argued for a balancing weights standard to replace the total surplus standard during the original Tribunal hearing, followed by the Federal Court of Appeal's decision and the Commissioner arguing for a consumer surplus standard before the Tribunal during the redetermination hearing, we are currently left with a standard which for all intents and purposes "fixes something that was never broken" Indeed, the evidentiary burden upon the Commissioner under the balancing weights standard appears to be more onerous than a properly articulated total surplus standard.

Total Surplus Standard: Yet Again

As the total surplus standard is widely misunderstood, it is useful to briefly review it. In economic terms, use of the total surplus standard means that a merger will not be challenged where it has, or is likely to have, the effect of increasing the sum of producer and consumer surplus. When a merger is anticompetitive it results in price increases, thereby giving rise to both a redistribution effect from consumers to producers and a negative resource allocation effect. The total surplus standard dictates that no differential weight will be accorded to the transfer from consumers to producers, instead viewing this redistribution as neutral.³

The rationale for a total surplus approach is firmly grounded in economics. Economists generally advocate treating the wealth transfer effects of mergers as neutral, because of the difficulty of assigning weights to certain effects *a priori* based on who is more deserving of a dollar. In contrast, a consumer-oriented approach, such as the consumer surplus standard, advocates treating consumers as more deserving of the wealth transfer than shareholders. This is not to say that it is not theoretically possible to assign differential weights to consumers and producers, which is precisely what the balancing weights approach does.

CANADIAN COMPETITION RECORD

In particular, there are two common misconceptions about the total surplus standard: (1) mergers in industries with inelastic demand necessarily result in small deadweight losses; and (2) minimal cost savings almost always outweigh deadweight losses, which fails to take into account the possibility of pre-existing market power. Both misconceptions are effectively dealt with by the Tribunal in the Decision.⁴ Moreover, the *Merger Enforcement Guidelines* clearly articulate that:

[i]n estimating the extent of negative resource effects of mergers, the Bureau includes the additional losses in total surplus that arise when market power is being exercised in the relevant market prior to the merger.⁵

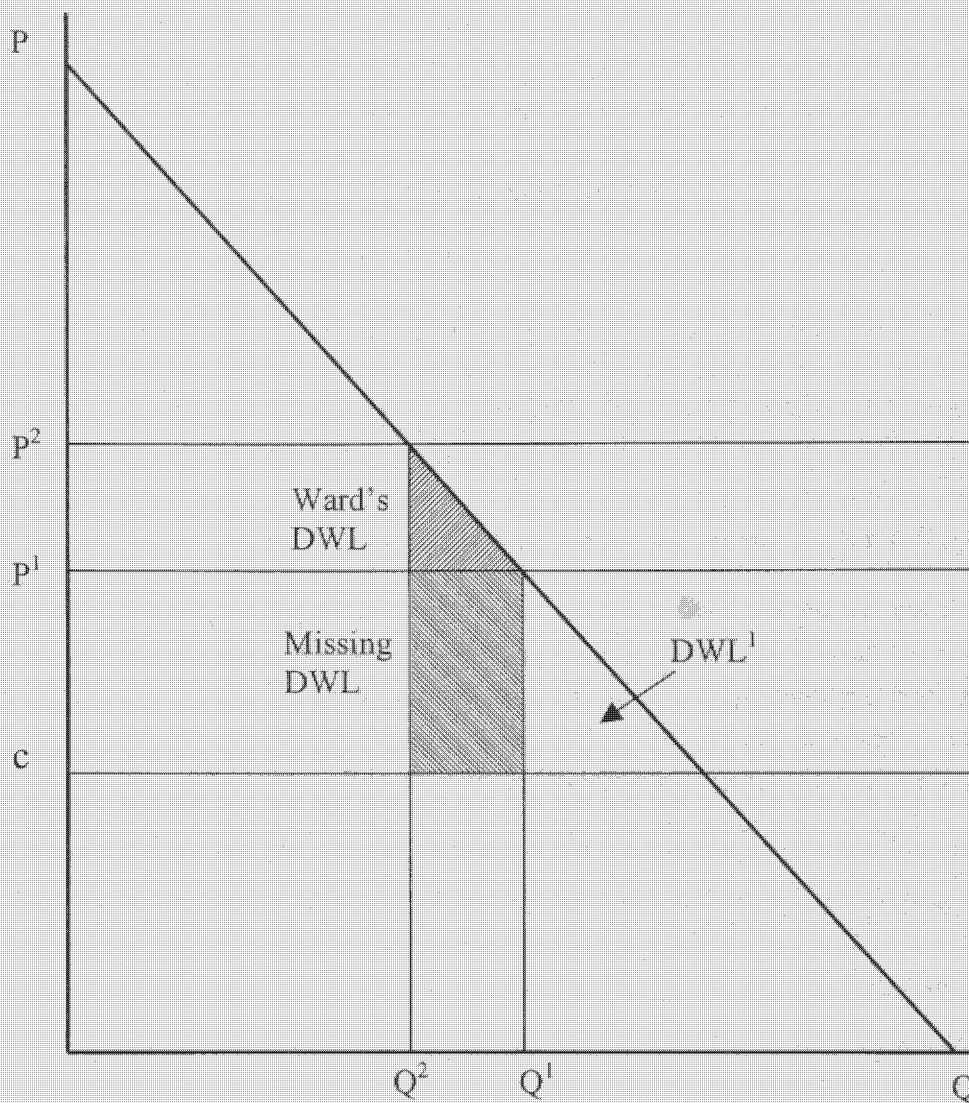
With respect to the first misconception, the magnitude of the deadweight loss resulting from the exercise of market power depends upon the percentage change in price, the change in quantity and the demand elasticity. The more inelastic is demand, the larger is the expected price increase post-merger. In his concurring opinion, Dr. Lawrence Schwartz illustrates this issue using the evidence presented by one of the Commissioner's economic experts, Professor Ward. Below, the table presented at paragraph 396 of the Decision is reproduced.

| | Elasticity = -1.5 | Elasticity = -2.0 | Elasticity = -2.5 |
|------------------------------------|--------------------|--------------------|--------------------|
| Residential propane price increase | 8.0% DWL = 0.5% | 4.1% DWL = 0.2% | 2.1% DWL = 0.1% |
| Industrial propane price increase | 8.9% DWL = 0.6% | 5.4% DWL = 0.3% | 3.3% DWL = 0.1% |
| Automotive propane price increase | 7.7% DWL = 0.5% | 4.5% DWL = 0.3% | 2.7% DWL = 0.1% |

Reading the columns in the above table from right to left, it is evident that as demand becomes more inelastic, the price increase expected post-merger rises and the associated deadweight loss also rises. Thus, it is not the case that inelastic demand necessarily implies smaller deadweight losses. In the case of *Superior Propane* the opposite is true – the more inelastic the demand, the higher the deadweight loss given the higher expected post-merger price increases.

The second misconception that was addressed by the Tribunal in the Decision relates to pre-existing market power. When pre-merger conditions are not competitive, a market-power increasing merger increases the size of the pre-merger deadweight loss by an amount that is much larger than a triangle. The following diagram taken from an article by Mathewson and Winter that appeared in the Fall 2000 issue of the *Record* illustrates the issue:⁶

CANADIAN COMPETITION RECORD



The pre-merger deadweight loss is identified as DWL^1 . The post-merger deadweight loss is equal to the shaded area plus DWL^1 . Thus, the change in deadweight loss as a result of the merger is given by the shaded area. In the case of *Superior Propane*, the Commissioner's expert, Professor Ward, only identified the area labeled "Ward's DWL" as the deadweight loss resulting from the merger. The rectangle below this triangle (labeled "Missing DWL") was not introduced until final argument, as the Tribunal describes at paragraphs 165-167 of the Decision.

CANADIAN COMPETITION RECORD

Despite the fact that the evidence put forward at final argument was excluded by the Tribunal, Mathewson and Winter use the evidence accepted by the Tribunal in the original hearing to quantify the Missing DWL area. The critical inputs to their calculation are the Tribunal's finding that the firm elasticity of demand equals -3.0 , which implies a price-marginal cost mark-up of 50% given pre-merger price levels, together with the market demand elasticity relied upon by the Tribunal in the original decision, which equals -1.5 . The true deadweight loss from the merger is calculated to be \$25.5 million rather than the \$3.0 million estimated by Professor Ward. Since the Tribunal accepted total cost savings of \$29 million, the mistake of not including pre-existing market power as part of the deadweight loss calculation is clearly a major one. Indeed, in the Decision, the Tribunal states at paragraph 169:

it appears to the Tribunal that the typical analysis of effects, based on the assumption that pre-merger conditions were competitive, may not have been appropriate in this case and that the deadweight loss may be much larger than the estimate thereof on which the Commissioner now relies. It therefore cannot be said that the Total Surplus Standard necessarily would have led the Tribunal to approve the instant merger had the deadweight loss been measured properly. [emphasis added]

Efficiency Trade-offs: Where Are We Now?

Given the failure to properly understand and apply the total surplus standard in *Superior Propane* at the time of the original hearing, a new standard – that of balancing weights – was argued by the Commissioner, although abandoned during the Redetermination hearing, when a consumer surplus standard was advocated. Having determined that use of a consumer surplus standard made section 96 ineffective or inoperative, the Tribunal adopted the balancing weights standard, in light of the Federal Court of Appeal's directions to it.

As the Tribunal employed it in *Superior Propane*, the balancing weights approach involves assigning a weight equal to "unity" (or one) to all producer gains from the merger and then solving for the value of the weight "w" that is assigned to all consumers such that the weighted surplus is zero (where the "transfer" is the transfer from consumers to producers) as follows:

$$1 \times (\text{transfer} + \text{cost savings}) - w \times (\text{transfer} + \text{deadweight loss}) = 0$$

To make the equation concrete, in *Superior Propane* and given the evidence before it, the Tribunal found that w equals 1.6, which means that to allow the merger the Tribunal must find that the weight that properly reflects the consumer loss is at least 60% higher than the weight on shareholder gains. (If one incorporates pre-existing market power using the calculus undertaken by Professors Mathewson and Winter noted above, the value of w is 1.1, meaning that the weight accorded to consumers would need to be at least 10% higher than the weight accorded to shareholders to cause the consumer losses to outweigh the producer gains.)

The devil was then in the proverbial details, when the Tribunal sought evidence on the income distribution for the various parties that would face higher prices in order to determine whether consumers did warrant a weight that was so much higher than that accorded to producers. Of course, this request for such detail is a natural consequence of use of the test. Indeed, it is one of the reasons why most economists are in favour of a total surplus standard – it is very difficult to value who is more deserving of a dollar.

CANADIAN COMPETITION RECORD

With the Tribunal's Redetermination decision once again under appeal, it is unclear where the efficiencies trade-off standard will head next. Added to this is the resurgence of Bill C-248, proposing further amendments to section 96. In light of this uncertainty, the recommendation by the House of Commons Standing Committee on Industry, Science and Technology in its Report *A Plan to Modernize Canada's Competition Regime* that the:

Government of Canada immediately establish an independent task force of experts to study the role that efficiencies should play in all civilly reviewable sections of the *Competition Act*, and that the report of the task force be submitted to a parliamentary committee for further study within six months of the tabling of this report (Recommendation 28)

is opportune, and a recommendation which hopefully the Commissioner will endorse.

In moving forward, we might consider how this particular turn of events brought us to this juncture. From an outside economist's perspective, the most important contributing factor appears to be the failure to understand all dimensions of the total surplus standard as it is articulated in the *Merger Enforcement Guidelines*. This should no longer be the case given the clear correction by the Tribunal of some of the more common misconceptions with respect to the total surplus standard. In particular, it is very important to account for pre-existing market power in measuring the anticompetitive effects from the merger, as is clearly outlined in the *Merger Enforcement Guidelines*.

Enforcement officials and litigators may resist accepting the fact of pre-existing market power under the misconception that this reduces the magnitude of the substantial lessening of competition that may result from the merger. Again, the case of *Superior Propane* is instructive on this point. Notwithstanding the Tribunal's mention of the likely existence of pre-existing market power in this industry, it still found that the merger was likely to substantially lessen competition, with prices rising, on the Commissioner's evidence, by 7% to 11% depending upon the product and after taking into account the pass-through of cost savings (at [453] of the Tribunal's original decision). Mergers in markets with pre-existing market power can still give rise to a substantial lessening of competition. Further, the greater the amount of pre-existing market power, the greater the efficiencies must be in order to offset the resulting welfare loss. As a consequence, the more closely a merger approaches a merger to monopoly, the less likely it is that any efficiency accompanying the merger will offset the resulting welfare loss. The total surplus standard does not need to be abandoned to achieve this result. It only needs to be properly applied as articulated in the *Merger Enforcement Guidelines*.

Notes

- ¹ See the articles on *Superior Propane* in this issue and the Fall 2000, Summer 2001 and Winter 2001-2002 issues of the *Record*.
- ² [2002] C.C.T.D. No. 10 (the "Decision"). The Commissioner has subsequently appealed the Decision.
- ³ For a fuller discussion of the economics, see D.G. McFetridge, "The Efficiencies Defense in Merger Cases" in M. Coate & A. Kleit, eds., *Competition Policy Enforcement: The Economics of the Antitrust Process* (Boston: Kluwer Academic Publishers, 1996).
- ⁴ The Tribunal corrects the first misconception at paragraphs 393-398, and the second misconception at paragraphs 165-169.
- ⁵ *Merger Enforcement Guidelines* at section 5.5, page 50.
- ⁶ Mathewson and Winter, "The Analysis of Efficiencies in *Superior Propane*: Correct Criterion Incorrectly Applied" (2000) 20:2 *Can. Comp. Rec.* 88.