COMMENT AND ANALYSIS

THE COMPETITION TRIBUNAL'S *B-FILER* DECISION

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Introduction

B-Filer[1] is the first contested refusal to deal case brought as a private action under the *Competition Act* and represents the first opportunity for the Competition Tribunal to consider the new competition test that was introduced when section 75 was amended in 2002. The applicants in the case, B-Filer and GPay, claimed that Scotiabank's refusal to continue supplying GPay with various banking services had caused GPay substantial harm, and that the refusal would have an adverse effect on competition by limiting GPay's ability to compete with Interac Online, a service similar to GPay's that is provided by Scotiabank and two other banks.

The Tribunal dismissed GPay's application, finding that GPay did not establish that the refusal had a substantial effect on its business and that it did not show that the refusal would have an adverse effect on competition. In making these findings, the Tribunal reaffirmed the *Chrysler*[2] product market definition test for "upstream" markets (for paragraphs 75(1)(a) and (b)), under which potential substitutes are assessed on the basis of whether switching to them would cause substantial harm to the applicant. It also rejected the opinion of GPay's expert economist that the hypothetical monopolist test should be applied instead.

With respect to the new "downstream" competition test (for paragraph 75(1)(e)), the Tribunal's analysis was consistent with the Federal Court of Appeal's recent decision in *Canada Pipe*[3] (which was cited by the Tribunal), in that the Tribunal used a "but for" analysis that consisted of a comparative assessment of the downstream market with and without the refusal.

Background

The GPay Service

B-Filer's complaint in this case centered on Scotiabank's termination of various banking services that it had been supplying to GPay (B-Filer's operating name). GPay had been using these services, along with similar services from other major Canadian banks, as inputs into the production of its own service, which allows consumers with access to internet banking to make payments to online merchants directly from their bank accounts.

A payer accesses the GPay service through a link on an online merchant's website. Following the link redirects the payer to GPay's website, where the payer is asked to identify her bank and enter the information required to access her account online (typically her user ID and password, sometime referred to as her "electronic signature"). GPay uses this electronic signature to access the payer's account in an online banking session, during which it transfers the appropriate amount of funds to its own account. At a later date, GPay transfers the funds, less its fee, to the online merchant.

GPay transfers a payer's funds to one of its own accounts using either online bill payment or email money transfer ("EMT"). If GPay has online bill payee status at the payer's bank, it transfers the funds by making an online bill payment from the payer's account to itself. This process occurs exactly the same way as any other online bill payment, except that instead of the account holder initiating the online banking session and completing a payment, GPay makes the payment upon receipt of the payer's electronic signature.

GPay used this method for processing payments from accounts at all major Canadian banks until December 2003,[4] when TD Canada Trust, CIBC and Alberta Treasury Branches ("ATB") terminated GPay's online bill payee status. After December 2003, GPay began transferring funds from accounts at these financial institutions using EMTs. To make a payment *via* EMT, an account holder with online access to her account logs into the account using her electronic signature, and then enters an amount to be transferred and the receiver's email address (along with a security question and its answer). The receiving party is notified of the pending transfer by email, and if he also has online access to his bank account, he can deposit the funds directly to his account in an online banking session (upon correctly answering the sender's security question). Although EMTs were designed by Interac to be a consumer product for the transfer of relatively small funds,[5] GPay uses this service to transfer the payer's funds from her account to its own account at another bank. GPay prefers to use online bill payment whenever possible because, unlike EMTs, there are no transaction fees or binding transaction limits with online bill payment. GPay continued to use online bill payment to transfer funds from accounts at Scotiabank, Bank of Montreal ("BMO") and Royal Bank of Canada ("RBC") after its online bill payee status was terminated at TD Canada Trust, CIBC and ATB.

Prior to this action, GPay deposited EMTs that it sent to itself from payers' accounts into small business accounts at RBC and Scotiabank. Both of these banks allow EMTs to be deposited into small business accounts, while all other banks only allow EMT deposits into personal accounts. These restrictions reflect the banks' intention to market EMTs as a consumer product, rather than a business product. None of the banks allow deposit of EMTs into large business or corporate accounts. There are limits on the amount that can be deposited into personal and small business accounts *via* EMT of $10,000 per day and $300,000 per thirty day period, and when GPay's business grew to the point where it began to approach these limits, it opened additional accounts at Scotiabank. By March 2005, GPay had opened 107 additional Scotiabank accounts, under various names (the bank has limits on the number of small business "profiles" that can be opened by a given business or individual).

Scotiabank's Termination of GPay's Banking Services

By April 2005, GPay was using online bill payment to process payments from accounts at RBC, BMO and Scotiabank, where it still had online bill payee status, and for payments for accounts at TD Canada Trust, CIBC

and ATB, it was using EMTs to transfer funds from payers' accounts at those banks to its small business account at RBC and its more than one hundred small business accounts at Scotiabank. The fact that GPay had opened so many additional Scotiabank small business accounts came to the attention of the manager at Scotiabank's Sherwood Park branch. Citing various violations of bank policies and rules, in May 2005 Scotiabank notified GPay that it would be terminating its banking relationship with GPay. At the end of September 2005, it withdrew GPay's online bill payee status at Scotiabank and closed GPay's deposit accounts. GPay retained its online bill payee status at RBC and BMO, and its small business account for receipt of EMTs at RBC.

GPay's Application

GPay applied to the Tribunal for leave to make an application under sections 75 and 77 of the *Competition Act*, and in November 2005 the Tribunal granted GPay leave to make an application under section 75, but not under section 77. In May 2006, GPay applied to the Tribunal for an order under 75(1) directing Scotiabank to accept GPay as a banking customer, and in particular to reinstate its online bill payee status (which GPay referred to as "Scotiabank Biller Services") and its small business accounts for the deposit of EMTs (which it referred to as "EMT Business Deposit Accounts").

The claims underlying GPay's applications were as follows: 1) GPay was unable to obtain adequate supplies of "Scotiabank Biller Services" and "EMT Business Deposit Accounts" (and that these two products constituted two distinct product markets); 2) GPay's inability to obtain adequate supplies of these two products was the result of a lack of competition among suppliers of these products; 3) GPay was substantially affected in its business by Scotiabank's refusal; and 4) Scotiabank's refusal was having or was likely to have an adverse effect on competition in the market for "online debit payment processing".[6] This last claim was, more specifically, that Scotiabank's refusal would adversely affect competition between the GPay service and Interac Online, which Scotiabank, RBC and TD Canada Trust offer through Interac Association. Interac Online, which began offering service in December 2005, also allows customers to make payments to online merchants directly from their bank accounts at the participating banks.

The Tribunal's *B-Filer* Findings

After a hearing lasting four weeks during the Fall of 2006, during which GPay and Scotiabank presented the evidence of expert economists and several other witnesses, the Tribunal issued its decision, in December 2006. It found that GPay had failed to satisfy any of the required elements under section 75; in particular, the Tribunal concluded that GPay was not substantially harmed by Scotiabank's termination, because there are close substitutes for the terminated banking services that GPay could and did switch to without a substantial negative effect on its business, and GPay did not compete with Interac Online downstream nor is it likely that these two services would compete in the future, so that the termination could not have an adverse effect on competition. In addition, the Tribunal indicated that even if all of the required section 75 elements were satisfied, it would not grant discretionary relief to the applicants because they were unable to comply with Scotiabank's contractual terms and conditions with respect to its banking services.

Market Definition in Chrysler *and* Xerox

Before the recent amendments to section 75, refusal to deal cases differed from the other civil remedial sections, particularly sections 79 and 77 (the abuse of dominance and exclusive dealing provisions, respectively) in that there was no meaningful statutory requirement that competition in any market be harmed. There was (and still is) a competition test of sorts, but this test is applied to determine the reason for any harm suffered by the business refused supply. If the applicant could show that it was substantially harmed by the refusal, and that this harm was the result of insufficient competition among suppliers of the product in a market, the Tribunal could issue an order for the respondent to continue supplying the applicant.[7] The *Chrysler* Tribunal is blunt in its views on the role of competitive effects in refusal to deal cases: "Section 75 is different than other sections in Part VIII of the Act. The test for whether the elements in the section are satisfied is not the effect on competition or efficiency."[8] The *Chrysler* Tribunal did, however, allow for the possibility that efficiency may be considered under section 75: "(t)hese considerations (i.e. the effect on competition and efficiency) enter, where applicable, in the exercise of discretion."[9]

The *Chrysler* Tribunal puts the focus of product market definition squarely on the effects of the refusal on the business refused supplies. Chrysler's expert economist opined that the product market referred to in paragraphs 75(1)(a) and (b) should be defined in relation to the market in which the refusor competes. He further submitted that the downstream market (the worldwide market for automobiles in his opinion) was highly competitive, and that therefore Chrysler's refusal must be efficient and cannot be motivated by market power considerations. The Tribunal rejected this argument, noting that "(p)roducts and markets can only be meaningfully defined in a particular context and for a particular purpose...In the case of paragraph 75(1)(a), the ultimate test concerns the effect on the business of the person refused supplies."[10]

In *Xerox*, the Tribunal was again asked to consider whether the focus of the definition of the product and market should be downstream, on the market power of the firm that refused to supply. The Director (as he was then) argued that the focus of product market definition should be the product refused supply, and that alternatives to this product should be included in the product market if they are acceptable "to the business refused supply in satisfying its customers."[11] The Tribunal considered the opinion of the respondent's expert economist that the relevant market for the purposes of section 75 "should be determined by reference to the market in which Xerox competes and that that is the end user market."[12] Just as *Chrysler*'s expert did, this expert opined that the intensity of downstream competition ensured that any upstream actions taken by the refusor – including any decisions about who to supply – would be efficient, because otherwise it would only disadvantage itself in highly competitive downstream markets. Furthermore, he opined that an order would "cause a welfare loss to consumers by substituting inefficient distribution systems for efficient...systems."[13] The Tribunal again rejected these arguments, and followed the *Chrysler* Tribunal in defining a market focusing on the refused product with reference to the effect of the refusal on the business of the person refused supply, in this case Exdos. In the words of the Tribunal, "neither the identification of the relevant product nor the definition of the relevant market hinges, for Section 75 purposes, on an assessment of the respondent's market power in the relevant market."[14]

Market Definition and Competitive Effects in B-Filer

Until *B-Filer*, then, product markets referred to in paragraphs 75(1)(a) and (b) were to be defined for the purpose of assessing the effects of the refusal on the business of the person refused supply, and the effects of the refusal on downstream competition were not relevant. In June 2002, the Act was amended through the addition of the new paragraph 75(1)(e) and by putting in place procedures that allow private parties to apply to the Tribunal for a remedial order under section 75. The new paragraph 75(1)(e) requires that "the refusal to deal is having or is likely to have an adverse effect on competition in a market."

Before considering the appropriate methodologies for defining markets, the *B-Filer* Tribunal had to first determine whether the "product" and "market" referred to in paragraphs 75(1)(a) and (b) were necessarily the same as the "market" referred to in paragraph 75(1)(e). Without considering this question in detail, the Tribunal noted that:

> Since the market of concern under 75(l)(e) need not be the market of concern in paragraphs 75(l)(a) and 75(l)(b), the market that best suits the particular context and purpose of 75(l)(e) can be separately considered when considering that paragraph of the Act.[15]

It becomes clear from the Tribunal's decision that, at least in this case, the 75(1)(a) and (b) market focuses on an "upstream" product that is used by the person refused supply as an input, while the focus of the 75(1)(e) market is downstream, on the products that are produced with the input. Thus, in *B-Filer*, the 75(1)(a) and (b) market definition focused on various Scotiabank banking services that GPay used as inputs into the production of its payment service, while the focus of market definition for 75(1)(e) is the GPay service and the Scotiabank payment service that GPay alleged it competed with (or would compete with if it was not terminated).

The Tribunal's Analysis of Upstream Markets (Paragraphs 75(1)(a) and (b))

Paragraph 75(1)(a) requires that a "person" is substantially affected in its business because of its inability to obtain adequate supplies of a product anywhere in a market on usual trade terms. The first issue considered by the Tribunal was the appropriate methodology for defining the "product" and "market"[16] given that the economics experts proposed different market definition methodologies. In the opinion of Scotiabank's expert economist (Professor Frank Mathewson), the appropriate methodology for the purposes of paragraph 75(1)(a) is what he called the *Chrysler* test. In Mathewson's formulation of this test, the product market definition for 75(1)(a) begins with the product that the supplier (Scotiabank in this case) refused to continue supplying to its customer (GPay). Other products belong in the same product market with the product refused supply <u>if</u> the customer (GPay) could turn to these products without suffering substantial harm. Conversely, if the switch by GPay to other products <u>does</u> (or would) cause substantial harm to the applicant's business, then this product is <u>not</u> in the same product market as the refused product.

The substitution to the alternative product would almost certainly cause some harm to the applicant's business, otherwise the applicant would have chosen it rather than the refused product in the first place (and having been refused additional supplies would presumably not incur the expense of applying to the Tribunal for an order to

supply). However, "some" harm is insufficient, and the question is whether switching would cause substantial harm: if the applicant suffered harm when it switched to the other product but that harm did not rise to the level of "substantial", then the alternative product is in the product market.

GPay's expert economist argued that the Tribunal should instead apply the hypothetical monopolist test to define the product market. This test, sometimes referred to as the "SSNIP" test (small but significant and non-transitory increase in price), is of course well known from merger analysis and is outlined in the Competition Bureau's *Merger Enforcement Guidelines*. According to this test, a product, say B, is included in the same market with product A, if a firm that was hypothetically the sole supplier of both A and B could profitably impose a small but significant and non-transitory increase in the prices of A and B. This test is typically used by the Bureau and the Tribunal to define markets in merger cases. The question in *B-Filer*, however, was whether, as submitted by GPay's expert economist, it is also appropriate for defining paragraph 75(1)(a) markets.

The Tribunal rejected the hypothetical monopolist test in favour of the *Chrysler* test, as proposed by Scotiabank's expert, recognizing that the hypothetical monopolist test is not suitable for defining paragraph 75(1)(a) markets. First, the focus of the "upstream" market is a "person", while the hypothetical monopolist focuses on the entire set of buyers of the firm's product, and while the hypothetical monopolist test is potentially capable of defining markets around a certain buyer – the test can simply be designed to focus on the switching behaviour of the specific buyer of interest – there is no need to use it for this purpose.

The Tribunal also had a more fundamental objection to the application of the hypothetical monopolist test to define paragraph 75(1)(a) markets, and that was that this test is not consistent with the purpose of the paragraph. The hypothetical monopolist test was designed as a tool for assessing market power, but as indicated in both *Chrysler* and *Xerox*, paragraph 75(1)(a) is not concerned with market power or competitive effects: the focus of market definition is solely on the effect of the refusal on the business of the person refused supply.

Application of the Chrysler *Test*

The Tribunal focused its market definition on the two products that Scotiabank had supplied to GPay but subsequently terminated (in September 2005), namely online biller status at Scotiabank and Scotiabank EMT business deposit accounts. The Tribunal concluded that "the relevant market is comprised of biller status at (Scotiabank) and deposit accounts...that allow for deposits of EMTs;"[17] in other words, it found that the product market included not only the products that Scotiabank refused to continue supplying to GPay, but also included products supplied by the other banks. The Tribunal further found that GPay had not been substantially affected by Scotiabank's termination.

GPay claimed that Scotiabank's termination of its banking services would (and did) cause it substantial harm by reducing the number and value of GPay's transactions from Scotiabank accounts. The Tribunal considered whether biller status at other (than Scotiabank) financial institutions and EMT deposit accounts are in the product market.

Biller Status at Other Financial Institutions:

The Tribunal considered the possibility that GPay customers who had been making online bill payments to GPay from Scotiabank accounts would switch to making payments from accounts at banks where GPay retained online bill payee status (after termination by Scotiabank, GPay still had online bill payee status at RBC and BMO) or use existing accounts at these banks. Online bill payee status at other banks would be substitutes for Scotiabank online bill payee status if a large number of payers who had been making GPay payments from Scotiabank accounts would make payments via GPay from accounts at another bank where GPay retained online bill payee status, since in this case GPay would lose little business from the termination of its Scotiabank online bill payee status.

The Tribunal concluded that the question of whether biller status at other banks is a substitute for Scotiabank biller status is "an open and unanswered question." Further, it concluded that "...due to this lack of information, we find that the relevant product market does not include biller status at other financial institutions."[18]

EMT Deposit Accounts:

When Scotiabank terminated GPay's online bill payee status, GPay began using EMTs to transfer payments from payers' Scotiabank accounts to its own accounts. Since Scotiabank also closed GPay's deposit accounts, GPay had to deposit these EMTs into accounts at other banks. Only RBC allowed the receipt of EMTs into small business accounts.

GPay claimed that there were several costs and disadvantages to GPay as a result of switching to EMTs to process Scotiabank payments. The Tribunal found that two of the disadvantages claimed by GPay were not disadvantages at all. In particular, GPay claimed that large volumes of EMTs can cause processing problems, and that its receipt of EMTs is highly constrained. The Tribunal found no convincing evidence with respect to either claim.

The Tribunal did, however, find that EMTs had some potentially significant disadvantages. In particular: 1) there is a $1.50 per transaction fee for an EMT, compared to no transaction fee for an online bill payment; 2) there is a $1,000 per transaction limit and a $1,000 per day limit on the value of funds that can be transferred *via* EMT, whereas there is a much higher $49,999 daily limit on online bill payment; and 3) there is a thirty minute hold on the transfer of EMT funds, during which the payer can cancel the payment.

Rather than conducting a detailed analysis of the impact of each of these disadvantages, and whether any disadvantages would cause it to conclude that "EMT deposit accounts" are or are not in the same market with "Scotiabank biller services", the Tribunal applied an effects-based test, which looked at the actual impact of the switch to EMTs on the health of GPay's business. In particular, it considered whether the termination by Scotiabank 1) reduced the growth in GPay's revenues; and/or 2) fundamentally changed GPay's growth opportunities.

GPay provided data on the monthly GPay payments made from Scotiabank revenues from a few months before Scotiabank's termination in 2005 until some time in 2006.[19] GPay used this data to support its claim that its revenues did not increase as much as they would have had it not been terminated by Scotiabank. GPay

claimed that monthly payments from Scotiabank accounts were 48% lower in October 2005 than they were in September 2005 (the month of termination). Furthermore, it claimed that the value of transactions from BMO accounts, which exhibited similar growth patterns as transactions from Scotiabank accounts prior to Scotiabank's termination, grew by about 118% since September 2005, while the value of transactions from Scotiabank accounts fell by 18%.[20] GPay argued that transactions from BMO accounts are a reasonable benchmark for the value of transactions that would have occurred but for the termination, since GPay continued to enjoy online bill payee status at BMO after September 2005.

However, the Tribunal found that there was significant month to month volatility in the value of GPay transactions from Scotiabank accounts. For example, GPay transactions from RBC accounts, which should not have been affected by Scotiabank's termination, decreased by more than 29% from October 2005 to November 2005. This observation led the Tribunal to conclude that "it is possible that some portion of the observed decline in Scotiabank transactions after September 2005 was attributable to causes other than Scotiabank's termination of the applicants' banking services."[21]

Further, the Tribunal cited some evidence that some GPay customers who made large value (exceeding $1,000, the EMT limit) payments from Scotiabank accounts also made payments from accounts at other banks. As discussed above, to the extent that GPay customers with Scotiabank accounts would simply switch to making payments from accounts at other banks where GPay still had online bill payee status, GPay's loss of transactions from Scotiabank accounts after termination would overstate its overall loss of transactions; in other words, some payers would switch to making large value payments from accounts at other banks, and thus GPay would suffer no loss in transactions from these payers due to the termination. To further investigate this possibility, the Tribunal considered the total value of GPay transactions (and not just those from Scotiabank accounts), and found that this value generally increased after the termination, with November 2005 being the only post-termination month in which the value of GPay's transactions was lower than it was in September 2005. This suggested the possibility of some substitution by GPay payers towards other banks where GPay had online bill payee status when GPay's Scotiabank banking services were terminated.

The Tribunal appeared to be open to the possibility that the termination may have caused substantial harm to GPay's business, as it did not find that the evidence precluded such a conclusion. There was simply not enough information available to the Tribunal: "(w)e cannot distinguish between decreases in the dollar value of Scotiabank transactions that are attributable to the Scotiabank termination and those that are attributable to other causes, including fluctuations for which there are no apparent explanations."[22] This suggests that additional analyses of the value of GPay's transactions from Scotiabank accounts, based on information and data on the determinants of monthly transaction values, had it been presented by the applicant, may have swayed the Tribunal. The Tribunal believed as much, indicating that:

> Analyses that may have shed light on the above were not carried out by the applicants... Information that might have proven helpful to the Tribunal includes information on the use of accounts at other banks by Scotiabank depositors to carry out GPay transactions, any information on regular users who may have stopped using the applicants' services post-termination either

> permanently or for a significant period of time, or who may have decreased the size of their transactions post-termination..."[23]

This suggests that there is not an overwhelming burden on applicants to show that they have been substantially harmed by a refusal. However, except in clear cut cases, the Tribunal will look for an economically sound estimate of the applicant's "but for" revenues (or, preferably, profits). This requirement could be satisfied through the estimation of an econometric model that accounts for all the historically important determinants of the profits of the person refused supply. This also suggests that the burden is on the person refused supply to provide the information and data upon which such an estimate would be based.

The Tribunal's Analysis of Downstream Competition (Paragraph 75(1)(e))

The new competition test in section 75 is contained in paragraph 75(1)(e), which requires that the refusal to deal "is having or is likely to have an adverse effect on competition in a market." This is the first case heard under this new test, and given the Tribunal's rejection of a downstream competition test in *Chrysler* and *Xerox* it was the first opportunity for the Tribunal to consider competitive effects at all under section 75. Having determined that the purpose of product market definition for the "upstream" market was to assess the effects of the refusal on the business of GPay, the Tribunal noted that the purpose of market definition for the "downstream" market is to assess the effect of the refusal on competition and, ultimately, on consumers.

The Tribunal first turned to the meaning of the "adverse effect on competition in a market"; that is, how should the paragraph (e) test be applied? It broke this question down into several parts. First, it considered how to determine whether there is an "effect" on competition. In interpreting effect, the Tribunal drew on previous Tribunal decisions in abuse of dominance cases and on the decision of the Federal Court of Appeal ("FCA") in *Canada Pipe* (which was also an abuse of dominance case). The abuse sections of the Act have a different competition test, which requires the Tribunal to consider whether the conduct at issue "has had, is having, or is likely to have the effect of preventing or lessening competition substantially in a market." Based on "similar wording" and a shared concern with an effect on competition, the Tribunal adopted the basic framework of paragraph 79(1)(c) jurisprudence to interpret "effect" in paragraph 75(1)(e), adjusting for differences in time frames[24] and the magnitude of the required effect ("adverse" v. "substantial", discussed below). In particular, the Tribunal followed the FCA's *Canada Pipe* reasoning, finding that paragraph 75(1)(e) "demands a relative and comparative assessment of the market with the refusal to deal and that same market without the refusal to deal."[25] The Tribunal also cited its *Laidlaw* decision, calling it "particularly clear" on the nature of the competition test:

> "...the substantial lessening which is to be assessed need not necessarily be proved by weighing the competitiveness of the market in the past with its competitiveness at present. Substantial lessening can also be assessed by reference to the competitiveness of the market in the presence of the anti-competitive acts and its likely competitiveness in their absence."[26]

Of interest in light of the FCA's recent *Canada Pipe* decision, the Tribunal appears to find no inconsistency between this decision and previous Tribunal decisions with respect to the competition test in section 79. It finds

that what is required is a "comparative assessment" of the markets with and without the refusal and, in particular, a relative assessment of the "competitiveness" of the markets is required.

The Tribunal then considered the meaning of "competitiveness": how does one assess whether the market would be more "competitive" without the impugned conduct? Citing previous Tribunal decisions in both abuse and merger cases, the Tribunal found that a market's "competitiveness" refers to the degree of market power. For instance, in *Nutrasweet* (an abuse of dominance case), the Tribunal wrote, in relation to the issue of whether competition had been lessened substantially, "...the question to be decided is whether the anti-competitive acts engaged in by [Nutrasweet] preserve or add to [Nutrasweet]'s market power."[27] It also cited its *Hillsdown* (merger) decision, where it wrote that "...[i]n assessing the likely effects of a merger, one considers whether the merged firm will be able to exercise market power additional to that which could have been exercised had the merger not occurred."[28] The "competitiveness" issue was also considered in light of an economic analysis of the nature of competition among firms. In effect, the Tribunal reasoned that any adverse effects that arise in a market – including a price increase, or a reduction in product quality or variety – are unlikely to occur in the absence of market power. Finally, the Tribunal considered the opinions of the economics experts called by both sides, both of whom analyzed the competitive effects of the refusal by looking at market power.

With respect to the meaning of "adverse", the Tribunal simply noted that from the word's "plain meaning", it implied a lower threshold than "substantial". The Tribunal did not have an opportunity to determine how much lower the threshold is under an "adverse" test, and this will have to wait for a future decision.[29]

To summarize the Tribunal's interpretation of the paragraph 75(1)(e) competition test, it found that this test required a comparative assessment of the market with and without the refusal, that competitiveness is to be assessed with reference to market power, and that "adverse" implies a lower threshold than "substantially".

The Tribunal's formulation of the competition test in paragraph 75(1)(e) left one potentially important question outstanding: is market power to be assessed with reference to the firm refusing to supply, or could the competitive effects requirement be satisfied by showing that some <u>other</u> firm's market power would be increased or enhanced by the refusal? In other words, if Scotiabank's termination of GPay's banking services diminished GPay's effectiveness as a competitor to some other firm but had no effect on Scotiabank's downstream market power, would the 75(1)(e) competition test be satisfied? This is an important issue because it affects the reach of section 75: if the applicant can show that some firm, and not necessarily the refusor, will see its market power increase as a result of the refusal, then section 75 applies to a wider range of situations. (This raises the motivational issue of whether a supplier of an input would ever refuse to supply for anticompetitive reasons if the beneficiary of the refusal was an independent third party.)

In abuse of dominance cases under section 79, the focus of the competition test is unambiguously on the market power of the firm that has engaged in the impugned behaviour, as indicated in the quote from *Nutrasweet* above ("the question to be decided is whether the anti-competitive acts engaged in by [Nutrasweet] preserve or add to [Nutrasweet]'s market power"). This focus is the result of paragraph 79(1)(b), which requires a showing that the respondent has engaged in a practice of anticompetitive acts. The Tribunal has interpreted "anticompetitive act"

to mean "an intended negative effect on a competitor" of the respondent, which leads naturally to a consideration of the respondent's market power in a downstream market under the competition test. There is no analogue to "anticompetitive acts" in section 75, leaving some uncertainty as to whether the focus of the competition test should be on the market power of the firm refusing to supply.

The Tribunal's findings on this important question are somewhat confusing, but the Tribunal appears ultimately to find that satisfying paragraph (e) requires that the market power of the refusor be enhanced. It initially indicated that "(t)he market of concern under 75(1)(e) is the market in which the applicants participate" [emphasis added].[30] This suggests that it may be possible to satisfy the requirements of paragraph 75(1)(e) by showing that the refusal increased the market power of some other firm, and not necessarily of Scotiabank. For example, if GPay had been competing with company XYZ (so that GPay and XYZ are in the same market) but not with Scotiabank before the termination, then if the market of concern under paragraph 75(1)(e) is the market in which GPay (the applicant) participates, the competition test could be satisfied by showing that XYZ's market power increased as a result of Scotiabank's termination of GPay's banking services.

The Tribunal's paragraph 75(1)(e) analysis, however, indicates a focus only on the effects of the refusal on Scotiabank's downstream market power (*via* Interac Online). The Tribunal first considered whether Interac Online and the GPay service competed with each other, and then whether they would be likely to compete in the future absent Scotiabank's refusal. Having found that these services are not, and are not likely to become competitors, it finds no adverse effects on competition from the refusal. This reasoning implies that the requirements of paragraph 75(1(e) cannot be satisfied by demonstrating that the refusal would increase the market power of another firm.

Current Competition

With respect to the evidence on current competition between Interac Online and GPay, the Tribunal first noted that there is very little (if any) overlap in the merchant bases of the two services: GPay's merchants consist almost entirely of online offshore gambling sites and dating services (these two types of merchants account for about 98% of GPay's revenues) while none of Interac Online's merchants were of this type. GPay had claimed that the two services were nearly functionally identical, and that its service was not limited to online gaming by any technical or operational characteristics. Noting that functional substitutability is not sufficient for finding that products are in the same market, and further considering that the expert economists for both sides (including GPay's economist) agreed that the services do not compete, the Tribunal concluded that Interac Online and GPay are not in the same market.

Future Competition

The Tribunal also considered the possibility that GPay would become a competitor to Interac Online in the future absent the refusal. If this were the case, Scotiabank's refusal could potentially have an adverse effect on competition. The Tribunal first limited the scope of its analysis to future competition for transactions exceeding $1,000, because this was the transaction limit for the transfer of funds *via* EMT (GPay appeared to be less

concerned with smaller valued transactions from Scotiabank accounts, which it could still process using EMTs even after Scotiabank's termination).

The Tribunal, in effect, concluded that GPay's inability to compete for large value transactions was due to several factors unrelated to the termination by Scotiabank, including GPay's lack of a track record and the fact that it required payers to disclose their passwords when making a payment through the GPay service (some prospective merchants declined to do business with a company that had such a requirement). Furthermore, the termination of GPay's online biller services by TD Canada Trust and CIBC in December of 2003 contributed to merchants' unwillingness to use GPay, since GPay could not process large volume payments from the full set of banks. The overall nature of the evidence, therefore, indicated that GPay's inability to compete with Interac Online for large value transactions had nothing to do with Scotiabank's termination. Although the Tribunal framed this in the language of market definition – concluding that Interac Online and the GPay Service are not likely to be in the same market in the future with regard to large value transactions – the economic implication of its finding was that Scotiabank's termination could have no effect on future competition between Interac Online and GPay.

Conclusion

The Tribunal's decision in *B-Filer* is well-reasoned and economically sound. The Tribunal not only reaffirmed its methodology from the *Chrysler* and *Xerox* cases for defining upstream product markets – anchoring product market definition to the purpose of paragraphs 75(1)(a) and (b) – it also provided substantial clarity as to how the test should be applied. Although it found that the applicant failed to establish that it was substantially affected by the refusal, the Tribunal provided some important guidance for future applicants, who should now be prepared to estimate their revenues "but for" the refusal if they hope to convince the Tribunal that they have suffered harm. The Tribunal will apparently not be satisfied with ambiguous evidence of revenue losses, and will rather require clear confirmation that the applicant's business would be healthier if an order to supply were granted.

The Tribunal's analysis of downstream markets under the new paragraph 75(1)(e) competition test is also encouraging. The Tribunal followed the Federal Court of Appeal's *Canada Pipe* reasoning, conducting a sophisticated comparative analysis of the market with and without the refusal. Having found no effect of the refusal on competition, however, it did not have an opportunity to interpret the meaning of "adverse", finding only that it imposed a lower threshold than "substantially"

Notes

* Principal, CRA International. The author was an economic consultant to Scotiabank on the *B-Filer* case. Comments from Frank Mathewson and Lisa Constantine on an earlier draft of this article are gratefully acknowledged.

1 *B-Filer v. The Bank of Nova Scotia*, 2006 Comp. Trib. 42 (CT-2005-006) [*B-Filer*].

2 *Canada (Director of Investigation and Research) v. Chrysler Canada Ltd.* (1989), 27 C.P.R. (3d) 1, aff'd (1991), 38 C.P.R. (3d) 25 [*Chrysler*].

3 *Canada (Commissioner of Competition) v. Canada Pipe Company Ltd.*, 2006 FCA 233 [*Canada Pipe*].

4 GPay began providing its service in 2002.

5 Interac describes an EMT as a "bank-based, Person-to-Person (P2P) transfer of funds that uses email for fast notification, while financial institutions transfer the funds using established and secure inter-bank settlement systems."

6 *B-Filer*, *supra* note 1, *Amended Application* at ¶8.1 – 8.4.

In *Canada (Director of Investigation and Research) v. Xerox Canada Inc.* (1990), 33 C.P.R. (3d) 83 [*Xerox*], the Tribunal mused on the role of the competition test in paragraph 75(1)(b), but apart from suggesting that situations in which a supplier who refused to supply certain customers because he wanted to change his distribution system would not "necessarily meet the test of occurring 'because of insufficient competition among suppliers of the product in the market'," did not clarify the meaning of this paragraph.

8 *Chrysler*, *supra* note 2 at 46.

9 *Ibid.*

10 *Ibid.* at 15-16. [emphasis added by the *B-Filer* Tribunal].

11 *Xerox*, *supra* note 7 at 37.

12 *Ibid.* at 43.

13 *Ibid.*

14 *Ibid.* at 58.

15 *B-Filer*, *supra* note 1 at ¶78.

16 In previous refusal to deal decisions, the Tribunal used the term "product" to mean "product market," as this latter term is used in abuse of dominance and merger matters, and the term "market" to mean "geographic market." In *B-Filer*, the applicant made no arguments or submissions on the geographic market, nor did the Tribunal consider the scope of the geographic market, perhaps because it was implicitly assumed by all parties that the geographic market was Canada (with one minor exception, GPay's service allowed payments to be made only from Canadian bank accounts).

17 *B-Filer*, *supra* note 1 at ¶89.

18 *Ibid.* at ¶100.

19 The Tribunal's decision did not disclose the time period covered by GPay's data.

20 There was some dispute about whether it was appropriate to compare GPay's post-termination transactions from Scotiabank accounts to its transactions in September 2005, since in that month GPay transactions from Scotiabank accounts were much higher than they were in immediately preceding months (apparently because of some very high value transactions by a single individual in that month). Using September 2005 as the pre-termination benchmark may therefore exaggerate any losses suffered by GPay because of the termination.

21 *B-Filer*, *supra* note 1 at ¶118.

22 *Ibid.* at ¶124.

23 *Ibid.* at ¶126.

24 Section 79 requires assessment of three time periods ("has had, is having, or is likely to have" an effect) while section 75 contemplates only two time periods ("is having or is likely to have" an effect).

25 *B-Filer*, *supra* note 1 at ¶197.

26 *Laidlaw*, at 346, as cited in *B-Filer*, *ibid.* at ¶199.

27 *Nutrasweet*, at 346, as cited in *B-Filer*, *ibid.* at ¶201.

28 *Hillsdown*, at 314, as cited in *B-Filer*, *ibid.* at ¶203.

29 The final interpretation issue was the meaning of "likely" and, citing the *Air Canada* Tribunal, the Tribunal concurred that "the requirement to establish the likelihood of an adverse effect requires proof that such an even is 'probable' and not merely possible" (B-Filer, *supra* note 1 at ¶211).

30 *B-Filer*, *ibid.* at ¶213.

CANADIAN COMPETITION RECORD

2006 IN COMPETITION POLICY AND ENFORCEMENT: AN ECONOMIC PERSPECTIVE*

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Introduction

Within the leading antitrust agencies around the world, the importance of economics in the policies, interpretations and enforcement of competition laws is widely recognized. Canada is no different. Accordingly, it is worthwhile to review some of the issues before the Competition Bureau from an economic perspective.

Before doing so, a number of caveats are in order. First and foremost, the opinions expressed here are solely those of the authors, and not necessarily those of the Commissioner, the Bureau, or any of its staff.[1] Economics is, properly, one of a number of factors playing crucial roles in the Bureau's enforcement and policy decisions. Although our knowledge of the issues considered below arises from "on the ground" practice, the perspective we bring to this paper is that from "ivory tower" theory.

Second, our review is not intended to be all-inclusive. Space limitations preclude such a review. Our selection is not necessarily a random sample of the Bureau's activities in the last year or so; nor does it represent the issues that necessarily topped any implicit or explicit list of Bureau priorities.[2] Rather, it reflects, to some extent, the ideas generated by the Bureau's enforcement efforts and policy initiatives that happen to have crossed our desks.

This leads to a third caveat. Particularly on the enforcement side, cases properly turn on idiosyncratic facts. The forest of principles can often get lost among the trees in any matter at hand. For that reason, and because we do not want to imply any explicit or implicit questioning of particular decisions that have been made or may be made in a particular case, we focus on general matters of economic analysis and interpretation inspired by the issues that have come to our attention in the last year, rather than get into specifics.

With that introduction, our assessments are framed to some extent by the structure of the Bureau.[3] We begin with some brief observations on the application of economics to the Fair Business Practices and Criminal Matters Branches, areas in which theoretical interests in general market efficiency often and properly take a back seat to practical concern with preventing and rectifying immediate harm to specific victims. Issues of both general policy and specific enforcement before the Mergers Branch have led to economic assessments in a number of areas – dynamic efficiencies, monopsony and market definition. The recent decision in *Canada Pipe*[4] provides a useful vehicle for examining the economics of abuse of dominance and bundling facing the Civil Matters Branch, questions receiving attention by antitrust enforcers around the world.[5] We conclude with some economic insights presented in the Bureau's competition advocacy efforts in the areas of telecommunications and intellectual property.

Fair Business Practices

The Fair Business Practices Branch (FBP) of the Bureau covers issues associated with consumer protection, such as mass marketing fraud and misleading advertising. In both Canada and the U.S., consumer protection enforcement has often not drawn on economics to the same degree that competition law has. There are a number of reasons for this. Probably the most important is that the harms that FBP is charged with preventing do not involve prospective predictions, based on economic theory and econometric evidence, of how the practices under investigation affect market performance. Unlike the consequences of a particular merger or many potentially exclusionary or predatory practices, the harms from fraud and deception seem direct and obvious.

The lack of need for sophisticated analyses, however, brings out a tension between some of the motivations of the consumer protection advocate and the methodological commitments of economists. The theories upon which economists rely to predict and explain market behaviour are predicated on the assumption that buyers and sellers can figure out how to make choices in their best interests, given the information at hand – a term unfortunately often designated, including by economists, as "rationality" Economists also have a great deal of confidence that the process of competition to provide buyers what they want will generally prevent any particular seller from exploiting any hypothetical advantage it might have over consumers. The economist's catchphrase, "consumer sovereignty", expresses well the belief regarding not just who should be in charge but, through the process of market competition, who is in charge.[6]

The consumer protection perspective treats these assumptions with less prior deference. The ability of consumers to determine the truth or even meaning of what they are being told is not taken for granted. They cannot be assumed to have made every appropriate strategic inference and discounted present value calculation to advise them what to do. Economics assumes that consumers will disregard claims that could just as easily be false as true; consumer protection advocacy accepts that buyers may be misled by false claims. They have less confidence that competition among firms in providing information to consumers will protect them from being misled. To many economists, the efforts of consumer protection advocates risk the strongest insult in their lexicon – "paternalistic" – in that the policies presume that enforcers know better than consumers what they want or mistrust the ability of markets to deliver the goods.

Tension between the two perspectives has led some to question whether consumer protection and competition law should even be in the same agency. At the national level, the U.S. goes both ways, with no consumer protection responsibility in the U.S. Department of Justice, but a Bureau of Consumer Protection in the Federal Trade Commission. Timothy Muris, former chairman of the FTC, has argued in favour of keeping both missions within the same agency, largely on the grounds that the antitrust side can reduce the consumer protection side's alleged scepticism toward markets.[7] That the influence could and perhaps should go in the reverse direction is unrecognized.

We suggest that utilizing the expertise of economics, but in ways other than those employed in most competition law settings, could reduce the tension. Markets can fail in ways that lead to consumer protection problems, but those failures differ from those associated with lessening or prevention of competition. Justifying consumer

protection as not wanting to give undue competitive advantages to fraudulent companies does neither consumer protection nor competition law justice.

The market failures endemic to consumer protection are those associated with asymmetric information. When sellers know something about the quality of their products but buyers do not, buyers have to make guesses about how well each seller's product performs, and won't pay more than what they guess the product is worth. If sellers with better than average products can't make claims buyers regard as justified, they may decide that it isn't worth it to make those better products available. Only worse than average products are sold, inducing relatively better products to leave the market until, at best, only the "lemons" are left for sale.[8]

The fundamental problem, as in the film *Cool Hand Luke*, is "failure to communicate".[9] If sellers with better goods can convey that information to consumers, the problem goes away, as those willing to pay for high quality can seek out sellers who can meet their needs. In economic terms, the market failure arises when quality claims can be made whether or not they are true. Even here, the economist and the consumer protection advocate are not quite on the same page. To the economist, the problem is that when claims can be just as easily true or false, consumers disregard all of them, and no information is conveyed. For the consumer protection advocate, the problem is that some consumers may act on the false claims despite their lack of a basis.

This difference in perspective was apparent at the 2005 Canadian Bar Association (CBA) plenary session, where an economist expressed scepticism regarding the Bureau's case against a tire retailer for claiming that a price was discounted from an "ordinary selling price" (OSP) that in fact had never been charged.[10] However, scepticism of this sort need not reinforce tensions between consumer protection advocacy and economic expertise. Consumer protection could be justified not as protecting consumers from making mistakes, but as protecting communication channels, to avoid creating information asymmetries serving no one. For example, OSP cases would be justified as protecting a means by which consumers seeing a discount for a product get information regarding quality by seeing how long other consumers had apparently been willing to pay a higher price.

Under this justification, one could also see consumers injured by false information, because they would then be relying on public enforcement of consumer protection law to ensure that the information was true. Justice for victims is a less abstract motivator for consumer protection advocates than ensuring accurate communication. Nevertheless, a law grounded in economics based on asymmetric information can be consistent with a desire to prevent and seek redress for specific consumer injury. In this regard, consumer protection law and competition law may be quite alike.

Criminal Violations[11]

As with FBP, the role of economics for criminal matters is relatively small compared to mergers or abuse of dominance. For the offences covered by criminal provisions of the *Competition Act*, particularly conspiracies, the key finding is the act itself and it's nature, e.g., that the conspiracy was carried out with intent.[12] Economics does play a stronger role in criminal enforcement in Canada than in some other jurisdictions. Under Canadian law, as famously different from U.S. antitrust law, conspiracies are not *per se* illegal; competition needs to be unduly prevented, limited, lessened, or restrained for these to be indictable offences.[13]

Hence, in Canada, collusion and cartels require explicit market definition.[14] Within a defined market, the Bureau bears the burden of meeting the "unduly" standard by undertaking a "partial rule of reason" inquiry to see if the effects are sufficiently serious.[15] In contrast, in the U.S., the most prominent roles for economics in criminal cases are narrowly empirical – to determine the volume of commerce for sentencing purposes,[16] or to calculate damages for the government (if it was the buyer as well as the prosecutor) or for private parties (in follow-on litigation for treble damages).

Although the theoretical and analytical role of economics in criminal enforcement may be relatively small in specific cases, it can still address overarching questions in the delineation of criminal offences and the determination of appropriate penalties.[17] There is a sense in some quarters that antitrust violations, as economic rather than violent crimes, do not warrant criminal penalties, multimillion dollar fines, and jail terms. In analyzing this issue at the Bureau, economics has provided two quite different models of deterrence that can clarify and bolster the case for criminal enforcement.

Optimal fines

The first model of deterrence is from William Landes.[18] He analogized competition law violations to torts or pollution – actions that involve harms to others who cannot directly influence the outcome, i.e., externalities. As with other externalities, the concern is that actors who do not take account of the harms of the activity – anticompetitive conduct, here – will do too much of it. To get the right amount, the goal is to "internalize the externality," as economists put it, by having actors bear the external costs of their actions.

For competition violations, Landes's framework leads to a "net harm to others" standard. Violators should bear the harms to buyers from the high prices resulting from the anticompetitive conduct.[19] When the pre-violation price equals marginal cost and the sellers act as a monopoly, that harm has two components: first, for those purchases still made, buyers lose from the increased expenditure at the monopoly price. This loss translates dollar-for-dollar into profits to the sellers. Second is the lost benefit consumers would have gotten from additional purchases that would have been made at the competitive price but are not made at the monopoly price. This second component is the so-called "deadweight loss" (DWL), named as such because it is lost to the economy as a whole, not made up for by profits reaped elsewhere.

The effect of a "net harm to others" penalty would be to encourage firms to engage in conduct with anticompetitive effects if and only if doing so would produce efficiency benefits exceeding the deadweight loss. Absent efficiencies, the net harm to others (increased expenditure plus DWL) exceeds the extra profits (from increased expenditure alone), implying that the anticompetitive practice would be deterred. However, if the extra profits include additional cost savings exceeding the DWL, the profits from the anti-competitive act will exceed the net harm to others, and it will be worth undertaking.

The prior price may not be the ideal competitive price, because of residual market power or differentiation. In that case, the pre-violation price exceeds marginal cost, and the net loss to society includes not just the DWL to consumers from the lost output, but the foregone profits from selling that output at a higher price. Since the

anticompetitive actor already bears those costs, it already takes them into account, and they neither would nor should be included as net harm to others.[20]

In addition, anticompetitive practices typically benefit competitors by allowing them to charge high prices.[21] For example, four out of five firms in a market might conspire to raise price, allowing the fifth to charge higher prices and earn greater profits. Under Landes's rule, higher profits reaped by firms outside the cartel reduce the net harm to others, and hence the damages that would be collected. This turns out to be optimal. Gains to the competitors from the anticompetitive practice come from the harms to the consumers paying the higher prices. Allowing those to cancel leaves us where we should be, where the perpetrators compare DWL to their efficiency gains.

Landes's standard treats a dollar of profit to sellers as equal in social value to a dollar of lost benefits to buyers. In some jurisdictions where consumer welfare is the exclusive focus, the Landes rule would provide too little deterrence, as it would allow some anti-competitive practices even if consumers suffer net harm through higher prices, when the DWL is outweighed by profits from increased efficiencies. In Canada, *Superior Propane* profits from efficiencies are recognized in evaluating mergers, but may (along with the profits from the higher prices) be given less weight if the transfer exacerbates distributional inequity.[22] As a matter of economic policy if not law, a similar weighting scheme might be applied to modify the damages calculated under the "net harm to others" principle so the defendant goes ahead with the practice only when the gains are not just "greater than" the harms to others but "offset" more broadly those harms, particularly when borne by relatively poor buyers.[23]

Criminal Deterrence

Landes's rule leaves unanswered the question of why any competition law violation should be criminal. Optimal damages could be awarded under civil cases without higher burdens of proof, requirements to prove intent and, most notably, the expense of incarceration. Werden and Simon argue that incarceration may be necessary because optimal damages may be impossible to impose without the firm going bankrupt, requiring non-monetary punishments in order to achieve appropriate deterrence.[24]

Posner offers a different and more intriguing justification for criminal penalties.[25] Perhaps to oversimplify, one can distinguish between exchanges that can be made at low transaction costs, directly or in the market, and those for which the transaction costs are too high to permit private resolutions. For the latter, exemplified by getting people to take care to avoid accidents, the market cannot work, requiring courts to set a price through liability rules to create proper incentives, e.g., taking risks only when the benefits to them exceed the expected costs they impose on others. Landes's "net harm to others" standard in the antitrust context is a perfect example.

Posner suggests that for transactions where voluntary exchange in the market is available, there is no need for courts to set price. All actions outside the market can and should be deterred, because the market can determine efficient outcomes. Theft is a crime rather than a tort not because a court could not calculate damages, but because there is no need to tolerate it at all and have a court set the price. If you value my car more than I do, you can make me an offer; there is no need to permit "optimal stealing," with court-determined compensation.

On this account, some anticompetitive practices, such as naked price fixing, are akin to theft. They provide no advantages over what the market can provide; buyers and sellers can achieve efficient outcomes through free exchange. These violations thus can be criminalized on the grounds that ideal deterrence of actions outside the market is infinite.[26] Posner's theory illustrates the contributions economics can make to criminal enforcement policy, even if contributions in specific cases are limited to defining markets and ascertaining effects necessary to show that a practice unduly lessens competition.

Mergers

Merger enforcement is typically much more economics-intensive than FBP or criminal matters, as the analysis depends crucially on market definition and industry dynamics. Rather than discuss specific mergers, we focus on three conceptual issues that have come before the Bureau both in specific matters and in broader evaluations of merger policy, and that are likely to remain topics for assessment and analysis over the coming years.

Monopsony

At least in theory, the exercise of market power is not only downward toward buyers. When a buyer (e.g., a firm) is in a competitive market with others, it acts as if it can purchase as much as it wants of a good (e.g., a production input) without affecting the price it pays. If a buyer is a monopsonist, if it wants more of an input, it generally will have to raise the price it pays for all of that good to induce sellers of that good to put more up for sale.[27] If so, the buyer will find that it profits by holding back on purchases to depress that price.

Just as upstream monopsony is not a prerequisite for downstream monopoly, there is no reason to consider monopoly as a prerequisite for monopsony. The effect and loss from monopsony is consistent with there being no effect on the selling price of what the monopolist offers. A firm that is the only employer in a small town may have the incentive and ability to reduce employment to hold down wages. However, it would have this ability even if it competes with firms from other towns in a wider provincial, national, or global market.[28]

Moreover, as the Bureau's *Merger Enforcement Guidelines* note,[29] transactions that go in one direction as monopsony can often be recast in economically equivalent terms in the reverse direction as monopoly, and *vice versa*. Consider an example from U.S. energy markets, contrasting gas with oil. In natural gas markets, pipeline companies purchase gas from producers in gas fields and then sell the gas to local distribution companies (LDCs). The margin between the purchase price in the fields and the selling price to LDCs determines the revenue reaped by the pipeline. If the pipeline is the only way for producers to get their gas to LDCs, then they are vulnerable to the exercise of monopsony power from the only buyer they face – the pipeline. In oil, producers pay pipelines to ship oil from the wells into the downstream markets. If that pipeline is the only way for those oil producers to get their product to market, that pipeline has a monopoly over transportation services.

With regard to competitive effects and economic welfare, oil pipeline monopoly is equivalent in all respect to the gas pipeline monopsony. This example generalizes; one can turn a monopsonist of an upstream product into a monopolist in the provision of services to sell the product to downstream consumers. The only requirement is that there be markets at both ends, that the single firm in the middle is neither the initial producer nor the end

user. This condition will generally hold for monopsony stories, as the only exception would be monopsony power held by groups of consumers.[30]

Nevertheless, some asymmetries may affect monopsony as a justification to oppose mergers. For monopoly to be a concern, selling more must require cutting price, i.e., demand curves slope downward. Because the presence of a fixed set of consumers is a given, the need to cut price to sell more is a reasonable generalization. By contrast, in monopsony those harmed by the market power, sellers, can enter and exit, unlike the consumers who might be buying from a monopolist. The requirement for monopsony that buying more requires that prices go up not only need not hold, but in a paradigmatic competitive market for the sellers' product, with free entry, supply curves will be flat. Unless different firms have different production costs, price will be driven to a constant minimum average cost of production, regardless of the quantity purchased.

In addition, unilateral effects stories may be less applicable in monopsony contexts. In the standard "unilateral effects" story, a merger between two differentiated product suppliers results in a price increase because after the merger each firm would take into account the profits such an increase creates for the other. While it is relatively easy to see how products could be differentiated from a consumer's perspective, it is less apparent how purchasers might be differentiated from a seller's perspective. One can imagine differentiation in labour or natural resource markets, where differentiation is driven by different costs in delivering resources to buyers at different locations. But if unilateral conduct stories are difficult because sellers don't differentiate among buyers as long as they get their money, coordinated effects – that a merger will facilitate collusion to hold prices down – may play a larger role.

Dynamic Efficiencies

As technological change and innovation expand their role in market economies, a matter of increasing interest in the Bureau and to competition authorities elsewhere is how so-called "dynamic efficiencies" should affect the evaluation of a merger. Defining dynamic efficiencies is not easy; perhaps the most useful is to distinguish them from "static efficiencies," which would be relatively immediate potential cost savings. This distinction suggests a definition that dynamic efficiencies are those difficult if not impossible to anticipate. This does not make them imaginary; a retrospective study of the benefits of U.S. deregulation attributed the lion's share to those unanticipated gains.[31]

Even if dynamic gains are observable in retrospect, it is difficult to incorporate into prospective merger assessments unanticipated gains from organizational innovations, cost reductions, or new product development. Complicating the assessments is that, contrary to the presumption that dynamic efficiencies reduce concerns with mergers (and the need for competition law), they may increase concern with mergers that, when viewed statically, seem benign. Dynamic efficiencies can decrease or increase concern at both the market definition and competitive effect stages of merger assessment.

Consider the conventional case, where dynamic efficiencies broaden the market and reduce concern with a merger. Conventional merger analysis might identify a concentrated market, but dynamic considerations suggest that

innovations, particularly in response to the prospect of higher prices, would lead to entry that mitigates the effect of the increased concentration. Such possibilities should be incorporated in merger analysis, but as with other efficiencies, the burden should be on the merging parties to make such claims substantial and verifiable.[32]

Dynamic efficiency concerns could, however, make problematic a merger between two firms that presently do not compete, but because of technological change may compete in a future market. Suppose that during the late 1990s, Microsoft had merged with Netscape instead of developing its Internet Explorer browser. At the time, they were in separate markets, but if Netscape would have competed with the Windows operating system in a future market for supporting application programs, as theories of the monopolization case presume, such a merger would have lessened competition.[33] Absent such dynamic considerations, a seemingly benign merger could have been quite problematic. Plaintiffs should be able to raise such arguments, but they should bear the burden of gathering convincing evidence that innovation and technical change will lead firms not in the same present market to be among a few likely competitors in some future market.

When it comes to lessening competition and welfare effects, the conventional story is that dynamic efficiencies will create benefits from more rapid introduction of new products and processes that should be balanced against any substantial lessening of competition that the merger would create. This should be treated as any other efficiency defense, with defendants bearing the burden of making such claims cognizable. This should include a persuasive showing that the dynamic gains would not be realized without the merger, either through independent R&D by the parties or the innovative efforts of competitors. This may be difficult, as such a showing presupposes they alone will have the ability to achieve these innovations, but that their merger would not suppress their incentives to come up with those innovations.

This shows how dynamic efficiencies can increase the competitive harms from a merger. A static analysis might not find a substantial net effect, but that there could be competitive harm if the merger reduces the incentives for the parties to develop new goods and services. In such a case, the Bureau should bear the burden of proof that a merger's dynamic effects are more than speculative. This requires an assessment of the universe of likely innovators to show that a merger would lead to slower and smaller realization of these dynamic benefits.

Dynamic efficiencies can play an important role in merger assessment, in either direction – if they can be taken out of the realm of speculation and made, if not quantifiable, at least qualitatively and verifiably substantiated. The assessment of how dynamic considerations can make mergers both more or less problematic suggests that the burden of proof should rest on the side for which the efficiencies matter. If, under conventional understandings, dynamic efficiencies make an otherwise anticompetitive merger benign or beneficial, defendants should bear the responsibility of coming up with a preponderance of the evidence for their case. Plaintiffs should bear that burden if dynamic efficiencies make the merger one of concern because it would put the parties in the same concentrated future market or impede the development of new products and processes.

Quality Effects

The standard concern with mergers is that prices will increase due to less competition, based on either unilateral decisions or coordinated action. However, at least in part, mergers may raise concerns regarding quality

reductions. For example, in objecting to Cineplex's acquisition of Famous Players, the Bureau was concerned with reductions in competition to provide higher quality movie theatres as well as with respect to ticket price.[34] Competition on quality may be the primary focus of a merger in sectors where price is set by government policy, as may arise in Canadian health care markets.[35] Quality effects can be quite important, as the choices firms make could determine whether or not a merger increases welfare.[36]

The quality effects of mergers seem as obvious as the price effects, in that firms could just as easily increase profits by charging the same price for more cheaply made goods, if they face less competition to attract consumers. Modeling the effects is considerably more complex. Adding quality to a model of an industry adds a third dimension beyond price and quantity, the hallmark of partial equilibrium analyses. Simply adding it as a competitive variable is not helpful since, all else equal, consumers would flock to the higher quality item.

To analyze competition on quality in a meaningful way, one needs a model in which firms offer differentiated products where consumers have differing willingness to pay for higher quality. We have not devised a full model that would allow definite predictions, but models dealing with different aspects of oligopoly interaction in differentiated markets offer useful indications.[37] Consider a unilateral effects approach to how a merger would change the quality decisions by two firms. Call the two firms L and H, where L makes a single good with low quality Q_L, and H makes a single good with high quality Q_H. After the merger, the combined firm continues to offer two products; the question is how they adjust their quality, specifically, whether Q_L or Q_H is likely to fall or rise after the merger.[38]

Two effects appear to combine to affect Q_L and Q_H. The first, a "direct interaction" effect, indicates that both would fall. Pre-merger, L and H set respectively Q_L and Q_H to maximize each firm's separate profits. In doing so, they neglect pecuniary externalities, that when each firm reduces quality, it increases demand for the other firm's product and thus its profits. Merger internalizes this externality, giving each an incentive to reduce quality below pre-merger levels. This is no different than the standard unilateral effects story for why merger leads to higher prices – each firm now takes into account previously neglected effects on the other party's profits.[39]

There is a second effect. Typically, firms in differentiated product markets would want to increase the "distance" between their products, to reduce competition between them. Consider, for example, two gas stations choosing locations along a road. As one moves farther from the other, all else equal, it increases profits as the other station becomes a less relevant competitor. The gas station will balance those profits against other demand and costs characteristics in deciding where to locate. Absent merger, this creates a pecuniary externality, in that moving farther from the second gas station increases that station's profits as well. Post-merger, as with the direct quality decisions, the parties would internalize those benefits, and thus move farther apart.[40] Looking at distance here as the difference in quality levels, all else equal, this "added distance" effect of the merger would be for H to increase Q_H and L to decrease Q_L.

Putting the "added distance" and "direct interaction" effects together implies first that Q_L falls after a merger. This boosts demand for H's product both by weakening the attractiveness of the substitute on inherent quality grounds and making it a less close competitor; both effects now internalized by L. The two effects, however,

make no prediction about Q_H. The direct quality effect would lead H to reduce Q_H, but the added distance effect would lead it to increase the distance between it and L's lower quality product by increasing Q_H.

A full model, if tractable, might suggest parameter values indicating when different effects most influence Q_H. For enforcement, one needs to factor in the reactions of competitors, who would tend to respond to competitive opportunities created by either effect.[41] As with any merger, the prospect of entry can mitigate competitive concerns. In addition, the added distance effect can, by increasing product variety, increase welfare and thus mitigate any harm from the merger.[42]

Abuse of Dominance

Perhaps the most prominent abuse of dominance case undertaken by the Bureau in recent years is its litigation against Canada Pipe for its "stocking distributor program" of bundled rebates. Of particular note is the Federal Court of Appeal's (FCA) recent decision remanding the case to the Tribunal for further review.[43] As the matter has not been resolved, we disclaim any representations regarding specifics. Our focus is on general issues relating to abuse of dominance and bundling.

"Anti-competitive Acts"

A first issue has to do with how economics might impart meaning to the legal construction of a parliamentary statute. The particular clauses of the *Competition Act* are section 79(1)(b)-(c), which list as criteria for an abuse of dominance finding that

> (b) that person or those persons have engaged in or are engaging in a practice of anti-competitive acts, and
>
> (c) the practice has had, is having or is likely to have the effect of preventing or lessening competition substantially in a market.

The issue is joined by the FCA's observation that separate statutory clauses should be interpreted to have separate meanings, hence whether an act is "anti-competitive" under 79(1)(b) cannot depend on "the effect of preventing or lessening competition".[44] By implication, it has to be possible for a practice to be an anti-competitive act (satisfying 79(1)(b)) yet not be anticompetitive in effect (and thus not satisfying 79(1)(c)).

To economists, whose sole interest is competitive effects, the implication that an act can be anticompetitive without anticompetitive effect is puzzling. If not effect, then what? The FCA interprets "anti-competitive" with reference to two tests:

> Two aspects of this definition should be noted. First, an anti-competitive act is identified by reference to its purpose. Second, the requisite purpose is an intended predatory, exclusionary or disciplinary negative effect on a competitor. [emphasis in original][45]

Both aspects conflict with economic approaches to competition policy. First, references to "purpose" and "intended" refer to states of mind. If competition law is to be guided by economic effect rather than psychological

motivation, this is not helpful. The psychological nature is highlighted by the apparently redundant phrase "subjective intent." If "intent" is a state of mind, it is inherently "subjective".[46]

The FCA states that establishing "subjective intent" is not necessary, but not because it is a peculiar turn of psychological phrasing, but because it is too hard to prove.[47] On the contrary, intent is too easy to prove. This is especially so if an anti-competitive act is defined, under the second criterion, as one directed to harm a competitor. Outside the text-book, especially when a firm's divisions and employees are evaluated in part on the basis of relative as well as absolute performance, explicit expressions of a desire to trounce a named competitor, in particular taking its customers and suppliers from it, will be common if not routine.

This brings us to the second criterion, that the intended effect be to harm a competitor. It is unfortunate to have on the record the statement that an act taken with the purpose of having a "negative effect on a competitor" is by definition anticompetitive. Such an interpretation reinforces the idea that the purpose of competition policy is to protect competitors. All sorts of acts hurt competitors, primarily charging lower prices and offering better service. On that account, firms would and should be acting anti-competitively all the time. There is perhaps a qualification, which is that the point is not just harm to competitors, but the intent to exclude, predate or discipline them. But as noted above, this relies on psychology rather than economics and presupposes an ability to separate good intent to beat out a competitor from bad, without looking at effects, which the FCA ruled out.

The FCA's decision, however, points to an escape that preserves an independent meaning for this clause without invoking either intent or a presumption that that which injures a competitor is anticompetitive. It begins by noting that the FCA, in its claim that "subjective intent" is difficult to prove, allows one to establish that an act is anti-competitive

> by reference to the reasonably foreseeable consequences of the acts themselves and the circumstances surrounding their commission[.][48]

Without looking at either intent or harm to competitors, one might distinguish 79(1)(b) and 79(1)(c) by having the former refer to predictable effects and the latter refer to actual effects. Before a firm is found to have violated a competition law, its actions might have to be both predictably anticompetitive and actually anticompetitive. If someone does something that turns out only by surprise to have been anti-competitive, they ought not be liable. In addition, if someone does something that one would expect to have been anti-competitive but turns out not to have had that effect, perhaps they also should not be found liable, on the grounds that the predictive theory may not be as sound as previously thought.

Far from calling 79(1)(b) into question, this interpretation gives it pre-eminence. If the economic point of competition law (or any law) is deterrence, it by necessity is based on predictable effects. A "predictability" interpretation of 79(1)(b) would speak directly to this justification. It is encouraging that the FCA decision may open the door to such interpretations in the future.

The "But For" Test and the Dominance Prerequisite

As a clarification of the economics of abuse of dominance cases, the most important and promising contribution of the FCA decision is its reliance on the "but for" test in interpreting 79(1)(c)'s "likely to have the effect" of substantially lessening competition.[49] The issue should be whether competition would be greater but for the practice under scrutiny. But in asking the right question, the "but for" test, this interpretation can be at cross-purposes with 79(1)(a)'s requirement that "one or more persons substantially or completely control" a class or species of business. If they already have such control, how competitive could the market be but for the practice? The less competitive a market beforehand, the less room there is for a practice to substantially lessen or prevent it.[50]

The problem is illustrated very well in the excerpt from expert testimony on barriers to entry included in the Tribunal's initial decision, cited by the FCA in denying Canada Pipe's cross-appeal.[51] The excerpt lists five entry barriers: (1) high costs of new or retrofitted plants, (2) excess capacity, making such investments unprofitable, (3) inability of importers to offer complete product lines, (4) a reputation for a "vigorous response" to import competition, and, last, (5) the bundling program at issue. Although the last is listed as most important, the length of the list suggests that to the extent competition is already lessened and dominance created by the other four factors, it is harder, not easier, to argue that the industry would be substantially more competitive but for a bundle rebate.

The FCA correctly noted that the "but for" standard does not require that, absent the practice, a market would be perfectly competitive or achieve any other predetermined absolute level of competition. Nor need the practice lead to some absolute level of monopoly or consumer harm. Rather, the comparison is relative.[52] To lessen competition substantially requires only that but for the practice, competition would be substantially greater. Nevertheless, tension remains between one criterion, 79(1)(a), that presupposes control of a market and another, 79(1)(c), that requires a substantial increase in that control.

This tension is not unique to Canadian competition jurisprudence. It is inherent under any monopolization statute or common law predicated on the idea that exclusion requires prior market power.[53] Whether one calls a case "monopolization" or "abuse of dominance," the justification for halting a suspect practice is strongest if that relevant market would be perfectly competitive but for the practice. To reduce this tension, one might focus not on prior dominance, but on dominance that results from the practice. This entails examining how the practice creates new dominance over an input or complement that its competitors need to compete.

Bundle Discounting: Creating Market Power Upstream[54]

As with *Canada Pipe*, some recent cases in the U.S. featured claims that offering discounts across product lines, also referred to as bundled discounts, is exclusionary.[55] How to treat bundling remains a significant question without a definite answer, as indicated by the U.S. agencies advising the U.S. Supreme Court not to take a bundle rebate case because it could not advise the Court on what rule it should adopt.[56]

In looking at these cases, the usual practice is to compare some aspect of the rebate to some measure of the incremental cost of the bundled good.[57] Such tests have two related difficulties. The first is that they analogize such discounts to predation. In predation cases, a strict standard, e.g., that price must be below some measure of the alleged predator's costs followed by recoupment of profit, is justifiable to prevent excessive deterrence of the generally good practice of charging low prices.[58] As we explain below, this suggests a cost-based test for bundling that misses the competitive effects.

A more specific source of error is that economic analyses of bundling treat the buyers as if they were final consumers.[59] If so, it might be appropriate to view a bundle discount as something generally good, like pricing low – consumers get more products or features without having to pay much more for them – and thus anticompetitive only if predatory. In *Canada Pipe* and other bundling cases in the U.S., however, the buyers who received the discount are not end users but intermediate good providers in the production chain, such as retailers or distributors. Consequently, the anticompetitive effect of the bundling is not akin to predation, but arises because having to overcome a discount or rebate raises the price the bundler's competitors have to pay to get the products distributed. The relevant monopolized market is not the primary market in which the alleged monopolist operates, but the market for a complement used to make, distribute, or sell that product.

Bundle discounts are akin to exclusive dealing contracts. Exclusive dealing contracts with distributors, for example, may raise the price rivals have to pay for distribution. They may go up by as much as the amount they would have to compensate those distributors for breaching those contracts. The effective distribution prices they pay increase by at least the incremental cost of using nonexclusive distributors or providing distribution internally. The crucial factor is the degree to which the exclusive dealer ties up the distribution market thorough the contracts, based on the share of the distribution market covered by those contracts and the ease with which new firms (including the rivals in the primary product market) could enter the distribution market.

This suggests a two-step test for whether bundling is exclusionary, very much in the spirit of the *Merger Enforcement Guidelines*, but applied not to the market in which the rivals sell but the complement market (e.g., distribution), from which they are allegedly excluded:

- The first step is to see how much a bundle rebate or loyalty discount would increase the price a rival would have to pay, e.g., to get that distributor or retailer to carry its product. Some arrangements may reward distributors for carrying more of one firm's product, but the important issue is the extent to which they discourage distributors from carrying the products of the competitors.[60]

- The second step is to assess the competitive effect of the exclusion by inquiring as to its extent. Specifically, for the practice to substantially lessen competition, it has to cover a share of a relevant distribution market sufficient to raise the price rivals have to pay for distribution. This entails a merger-like inquiry into the definition of the relevant distribution market, share calculations, barriers to entry and ease of expansion.

If the practice does not raise the price to competitors of using a particular distributor significantly, or if the competitors can find other distributors to enter that market (or enter it themselves, through self-distribution) at

prices not significantly greater than those available absent the bundle discount, there is no competitive harm. If both conditions are met, such a discount would be competitively significant.

A full analysis of the practice would recognize efficiencies that might be associated with the bundle discount, e.g., in providing distributors with incentives to market the product as well as move it. Efficiencies should be considered, however, in the context of remedies. In monopolization or abuse cases, apart from damage awards or penalties, the remedy is generally to completely discontinue a practice. As with mergers, remedies should be less draconian. One need not discontinue an exclusionary practice (contract, discount, rebate), but it can be limited to a less than dominant share of the relevant complement market. If the practice has efficiencies, a firm would still engage in it, but not to the extent that it creates market power over a formerly competitive input or service. If the practice does not have efficiencies, a share restriction may well lead to the firm's discontinuing the practice anywhere if it is not allowed to impose the practice everywhere.

Telecommunications

A leading effort by the Bureau over the last couple of years has been to examine the criteria for deregulating telecommunications markets and consider how it would consider complaints of abuse of dominance as the Canadian Radio-television and Telecommunications Commission (CRTC) expands forbearance from regulation in that sector.[61] These efforts have raised a number of economic issues regarding market definition and its various contexts, three of which we discuss here – deregulation, dominance (e.g., "essential facilities") and access (multiple unit buildings).

Market Definition for Deregulation[62]

The formal process for defining markets arose in merger cases as a framework for assessing a prospective change – will a reduction in the number of independent competitors lead to a small but significant, non-transitory increase in price (SSNIP) above prevailing levels? Whether to deregulate raises a similar prospective question – will elimination of government price controls lead to a SSNIP above regulated prices? This similarity suggests that one could apply *Merger Enforcement Guidelines* (MEGs) to the assessment of forbearance.[63]

To analogize deregulating local telephone service to mergers, we need to treat the end state of the presence of a single deregulated incumbent local exchange carrier (ILEC) as if it were the result of a merger between, say, two previously separate firms using the same wireline technology to provide the same service as does an ILEC. The regulated price is analogous to the pre-merger price. Market definition, then, essentially treats the ILEC as the post-merger firm, and asks whether existing providers or new entry into, say, voice service or long-distance termination would preclude the "merged", i.e., forborne ILEC from instituting a SSNIP. One can imagine three outcomes:

- The relevant market is ILEC wireline voice service, and deregulation is equivalent to merger to monopoly.

- The relevant market is voice service including ILEC wireline and at least some other technologies, but within that market the ILEC is equivalent to a merger that creates market power.

- The relevant market is voice service as above, but the ILEC lacks sufficient market power to raise concerns within it because unilateral effects are small and coordination is unlikely.

The analogy between mergers and forbearance is not perfect in at least two respects. In many markets, because of regulatory policies, the regulated price may be below even a competitive price. Rates may reflect internal cross-subsidies to hold down residential rates, promote universal service, or set constant regional or national prices despite cost differences. Prices in high cost areas or to subsidized classes of customers might rise by more than a SSNIP – and may promote overall economic efficiency in doing so – even if the relevant telecommunications markets are competitive.

A more important difference is that the cost of erroneous intervention differs between blocking a merger and, analogously, continuing to regulate. With a merger, if one guesses wrong, one generally is left with a market with one more competitor than one otherwise would have had. Absent failure by one of the firms who aspired to merge, the main cost would be foregone efficiencies. Continuing to forbear, however, perpetuates the costs of regulation. Among the costs are those from getting the price wrong due to inadequate information and bureaucratic imperatives, and reductions in the incentives regulated firms may have to innovate and control costs. For these reasons, one might conclude that even if the difference between an ILEC's regulated and forborne prices might suffice to block a merger, one may still want to deregulate even if the resulting price increase to some or all customers exceeded a SSNIP.[64]

Market Definition for Dominance: "Essential Facilities"

While merger-based frameworks for defining markets, such as the MEGs, are useful for ascertaining when forbearance might make matters worse, they are less obviously applicable in ascertaining whether an unregulated firm has market power. In telecommunications and other areas of antitrust, the question is often framed in terms of access to an "essential facility."

The notion of essential facilities is problematic and, in the U.S., still officially unrecognized by the U.S. Supreme Court.[65] Cases south of the border point out three reasons why the essential facility doctrine has been controversial:[66]

- it requires price regulation;[67]

- duties to deal with competitors themselves discourage provision of facilities in the first place (emphasized in *Trinko*);[68] and

- courts can assess antitrust liability without it.[69]

Despite these controversies, the persistence of the concept reflects important underlying economic questions that, unfortunately, still lack answers both definitive and practical. Rather than using a definition of essential facility to ascertain whether a firm has market power and, thus, whether intervention to prevent the exercise of market power may be warranted, the inferential chain goes in the reverse direction.

To see this, we should begin by observing that a definition of essential facility entails some concept of market power. Suppose a service for which a firm has market power. Suppose further that that market power arises because the firm is the sole possessor of some indivisible asset or object, tangible or otherwise (e.g., an economically significant patent or copyright). One can call that asset or object an "essential facility" Such identification can come only after the ascertainment of significant market power (SMP), not before. To begin an analysis by attempting to define "essential facility" is to put the cart before the horse.

This leads to the question of when a single firm has SMP. The question is notoriously difficult. Merger guidelines procedures, based on consumer substitution in response to price increases, will not work, since an unregulated firm presumably has raised price to the point where a further SSNIP would be unprofitable – the *Cellophane* fallacy.[70] Profit and price-cost tests can be a poor measure because firms may be price takers yet earn rents due to specific cost advantages or unanticipated increases in demand.[71] Nelson and White suggest that a test could be whether a firm would cut price in response to entry.[72] This test also fails, as price-taking firms may also cut price upon entry if they had been earning rents or if entry would lead to excess capacity.

To seek a better answer, in theory, one needs to turn to first principles. A firm is exercising market power if it is cutting back output in order to raise price. This implies that if it were not able to raise price, it would not be reducing output. This suggests the following counterfactual test:

> A firm has SMP if, in the face of a small but significant non-transitory reduction in price, it would increase rather than decrease output.

If a firm has market power, a cap on price would cause it to increase output, as it would no longer have anything to gain by holding output back. If the firm would decrease output if price falls, it is responding competitively, with higher prices leading to more output.

Although this test shares with the *Merger Enforcement Guidelines* a reliance on a counterfactual – how consumers respond to a price increase for the MEGs; how firms respond to price decreases here – it has severe empirical and practical disadvantages. Although one might have natural experiments in which consumers and competitors see different prices and respond accordingly, there are unlikely to be observed situations in which a single firm faced an exogenous constraint on prices. Changes in demand over time can lead to observed correlations between price and supply, but that does not mean that a firm would respond to a regulated price cap by decreasing output. In theory, one could determine the marginal cost curve in the neighbourhood of the firm's current output and infer a supply curve from that, but this takes a great deal of care.[73]

The practical problem is that this counterfactual turns on its head the reason for looking at essential facilities in the first place. The rationale for the concept is to reveal the presence of market power, which might then justify regulation. The desirable chain of reasoning is:

Essential facility => market power => regulation could be worthwhile.

Unfortunately, the logic of the concepts goes in the opposite direction. The first implication arrow is reversed; only after ascertaining market power does one know if a firm's facility is essential. The second arrow should be reversed; the hypothetical value of regulation, whether a cap would increase or decrease output, is the only test for market power not subject to the *Cellophane* fallacy or other shortcomings. Hence, the inferential chain actually is:

Regulation could be worthwhile => market power => essential facility.

For those seeking to identify essential facilities in order to ascertain market power or whether a service might merit regulation, this is not a comforting conclusion.

Market Definition for Access (Multiple Dwelling Units)

Among the issues raised in the debate about competition in local telecommunications is the treatment of access to multiple dwelling units (MDUs), such as apartment and office buildings. The basis for the concern is that a resident of an apartment or a tenant in an office cannot choose between carriers that do not have lines into the MDU. An example of the centrality of this issue is that in its review of the merger of SBC and AT&T in the U.S., the only competitive remedy sought by the U.S. Department of Justice (USDOJ) involved office buildings in eleven cities into which both SBC and AT&T had separate lines.[74] In those situations, the parties entered into a consent decree (currently under review) that ordered divestitures of the rights to use one of the two lines going into the building.

Concern over access to MDUs, as exemplified by the remedy sought by the USDOJ in the SBC/AT&T merger, rests on two assumptions. The first is that constructing new lines from fibre or coaxial distribution lines under city streets to a MDU, and then running conduits within the building to the multiple units, is expensive. One can hardly count on there being a large number of providers, perhaps more than one, to most MDUs.

The second and more controversial proposition is that the nexus of competition is the MDU. The USDOJ's remedy presumes that ensuring multiple carriers access to MDUs protects meaningful competition. This is a specific instance of a widely accepted proposition that in telecommunications, the user's location is the geographic market. In its April 2006 decision on local telecommunications forbearance, the CRTC has said:

> [W]hat is important is the buyers' ability and willingness to switch their purchases in sufficient quantities from one geographic location to another in response to changes in relative prices. The Commission notes that, according to this approach, the geographic component of the relevant market for local exchange services would be each location, as buyers would not be willing to substitute calling from their location for calling from another location.[75]

Geographic markets based on customer location divert analytical attention away from the fundamental question of whether sellers from one area would keep those in another from exercising significant market power.[76]

The focus on each MDU as a market illustrates further difficulties. If it is expensive to lay communication lines to and within an MDU, one may well expect only one carrier per MDU. No markets are probably as structurally competitive as those for commercial and residential space. For that reason, the MDU problem is not that each one has only one carrier, no more than there is a competitive problem in that each MDU has contracts with individual electricians, plumbers, HVAC companies, LANs, or any other building service.[77] MDUs can compete on the quality of those services they provide. Choosing which local exchange carriers to admit, one, some, or all, is just another dimension on which they compete. If residential or commercial tenants prefer one carrier to another, they can take that into account in where they choose to rent or lease space. MDUs, in turn, can choose which carrier to offer their tenants, just as they choose other aspects of the services they provide. If tenants are willing to pay enough to have more than one option, the MDU market can respond as well by supplying units at prices that cover the cost of additional lines.

Even in a competitive MDU market, where choosing among competing telecommunications service providers would obviate any need to mandate that each carrier get access to each building, a significant initial transitional problem remains. Prior to new entry, the ILEC starts off with 100% of the MDUs. The solution to this problem need not and probably should not entail giving all carriers simultaneous access to any MDU. Rather, it should allow each carrier the opportunity to compete to be the carrier for any MDU. In theory, the best way to do this would be to transfer any inside wire, in-building wire, and underground cable entrance from the ILEC to the building owner.[78] Following such a divestiture, akin to that obtained by USDOJ in the SBC-AT&T merger, the building owner could at that point decide which carrier it wants to use.

Intellectual Property

Competition/IP Symposium

The interface between competition policy and intellectual property (IP) policy has increasingly been of interest for the Bureau over the past few years. The Bureau is not alone in this regard: in the US, the FTC and the DOJ held public hearings on competition and IP law and policy in 2002. Members of the Organisation for Economic Co-operation and Development (OECD) held a roundtable on IP and competition policy with a focus on the biotechnology industry in June 2004 and one on competition, patents and innovation in October of 2006.

Currently, the Bureau is partnering with government departments with responsibilities for developing and administering IP policy in a research initiative examining topics at the forefront of competition and IP law.[79] This initiative follows a similar one the Bureau undertook over 10 years ago which resulted in the publication of a research volume titled *Competition Policy and Intellectual Property Rights in the Knowledge-Based Economy.* This book was published as part of the Industry Canada research series.[80]

In the current initiative, the Bureau and its co-sponsors have created an international editorial panel to oversee the work on five research topics. These include

- Authorized generics: Examine the extent to which brand-name pharmaceutical companies in Canada have launched authorized generics and assess empirically their effect on competition, particularly from independent generics.

- Collective management of copyright: Examine Canada's current system of about 36 copyright collectives to determine whether it is minimizing transactions costs and encouraging the creation and dissemination of works.

- Extension of IP rights: Explore potential extension of IP rights through trade-marks, settlements, and other practices, and the effect of such conduct on innovation and competition in the marketplace.

- Compulsory licensing: Examine *Patent Act* and *Competition Act* provisions to determine their effectiveness, explore alternative regimes, and assess the division of responsibility among the Commissioner of Patents, the Commissioner of Competition and the Courts.

- Tying/bundling in the IP context: Review the economic literature and pertinent cases on tying to identify circumstances where tying could be used to extend IP protection and deter innovation and the key considerations for both competition and IP policy makers.

The Bureau hosted a symposium on March 29 and 30, 2007, with approximately 50 participants consisting of academics, practitioners and government representatives with responsibilities concerning competition or intellectual property policy. The symposium was an opportunity for the authors to present their research and all participants to have an in-depth discussion of the issues. The research stemming from this exercise should provide guidance on future Canadian IP policy development and Bureau enforcement in this area.

Digital Rights Management and Technological Protection Measures

Recent discussion of copyright reform in Canada has concerned activities and/or devices that could be used to circumvent technological protection measures (TPMs). TPMs are digital locks designed to prevent infringement of copyrighted material made available in digital form such as CDs, DVDs or material provided on the Internet.[81] Preventing the ability to circumvent TPMs has been addressed in two World Intellectual Property Organisation (WIPO) treaties drafted in 1996: the *Copyright Treaty* and the *Performances and Phonograms Treaty*. The US amended its copyright legislation to comply with them with the passing of the *Digital Millennium Copyright Act* (DMCA) in 1998. Canada is considering amending its *Copyright Act* to comply with the WIPO treaties and some have looked at the DMCA as a possible model.

The DMCA has been subject to criticism of the scope of this legislation and its perceived exclusionary effects on innovation and competition.[82] The Bureau has a keen interest in ensuring any proposed legislative change does not harm competition in Canada. Leading concerns raised with respect to TPMs have been: (i) foreclosing competition in aftermarkets, (ii) impeding innovation in security technologies, (iii) allowing international market segmentation, and (iv) preventing interoperability between technologies.

Aftermarkets. The term "aftermarkets" refers to the provision of goods and services that are procured after a durable good has been purchased that, in some sense, go with that durable good because consumers are "locked in" The leading example from US antitrust law comes from *Kodak v. Image Technical Systems*,[83] in which the Supreme Court held that Kodak had to stand trial on charges of monopolizing the aftermarket in servicing Kodak copiers by denying parts to Image Technical Sytems and other independent copier maintenance companies. This decision has received considerable economic analysis on both sides,[84] although recent legal research suggests that it has not had much effect in actual antitrust litigation since the ruling.[85]

With qualifications expressed below, arguments against such cases are first that competition in the market for the services provided by the durable goods will drive overall prices down to cost. Aftermarket restrictions allow initial good sellers with some market power to meter demand for their products through aftermarket sales, promoting price discrimination that can expand output for the durable good. Finally, since a durable good supplier normally benefits from more aftermarket competition, suppressing such competition presumably is justified only if it reduces overall marketing cost or enhances demand, e.g., if internalizing maintenance helps preserve a reputation for quality.

Two qualifications warrant consideration. The first, probably rare, is that entry into aftermarkets by independent suppliers in some way facilitates their later entry into the primary market. A firm with market power in that primary market might want to exclude potential entrants by preventing entry first into these aftermarkets.[86] A more compelling argument is consumer myopia – that when consumers buy products, they do not realize that they will be locked-in and thus have to pay higher than competitive prices in after-markets for replacement parts, maintenance services, upgrades, and the like. Even if consumers are myopic, firms need not have market power. Expected profits in aftermarkets will be competed away in the market for the primary product.[87]

Such competition need not achieve the ideal, as it would lead to prices below cost for the durable goods and above costs in the aftermarkets. It is not clear that competition law should become involved to raise one price and lower another. When the durable good supplier has market power – a likely prerequisite for competition law enforcement – the benefits of price discrimination become more significant.[88] A more appropriate route may be to apply laws relating to fair business practices. Locked-in consumers may lack the foresight or wherewithal to enter into contracts, or know that they should have done so, to protect themselves against high aftermarket prices. The issue becomes not abuse of dominance but abuse of consumer ignorance, especially if consumers either would reasonably believe that aftermarkets would be open or, in the worst case, if the durable good producer had assured consumers it would keep its aftermarkets open.

Innovation. The second class of arguments used against TPMs is that these can be used to restrict the dissemination of information regarding how to get around encryption and other technologies used to protect intellectual property. At some level, this is obviously true, but one might similarly observe that innovation property protection technologies might be suppressed by laws making burglary illegal. Locks, doors, and windows, and methods to penetrate them, may not be as advanced as they might be were private property less protected.

Innovation in improving the production and use of undesirable goods and services is not necessarily an economic or social benefit. The innovation argument appears little more than an expression of a belief that some or all

aspects of the electronic information sector would perform more in the public interest if intellectual property rights were weaker, if not absent. That may well be but, if so, the debate should not be about TPMs, but whether producers of intellectual property should get less intellectual property protection.[89]

International price discrimination. TPMs could enable IP owners to segment international markets for the purposes of price discrimination. An example is the use of geographic zones for the distribution of DVDs. TPMs prevent consumers in one zone from playing DVDs earmarked for another zone, because those consumers' playback devices are not programmed to bypass that particular zone's DVD TPM.

This argument is primarily about whether it is in a country's economic interest to allow parallel importation of IP, and not TPMs as such. Parallel imports allow domestic consumers the opportunity to import products incorporating the IP from the jurisdiction with the lowest price. Such a policy could harm domestic IP owners since it would reduce the potential rewards they could earn from their creative works. If a country, on balance, were a net importer of copyrighted works, the logic of allowing parallel importation would be that the gains to domestic consumers of allowing the practice would outweigh any loss to domestic IP creators. Assessing whether this type of policy would enhance a nations' economic welfare, in light of global agreements to protect IP, is very complex. From our perspective, this assessment seems more a matter of trade policy rather than competition policy.

Interoperability. TPMs may restrict competitors' products from interoperating with one firm's popular product or service. A recent example is that music downloaded from Apple's iTunes site can be used only on Apple's iPods. Some commentators suggest that exclusion by preventing interoperability could allow Apple to maintain high prices for its iPod and perhaps to charge high prices for music.[90]

Aside from the factual issue of whether Apple's iTunes policy is likely to enhance its market power,[91] the argument against TPMs preventing interoperability seems again to be an argument that IP protection is overly broad. The essence of the debate boils down to the suggestion that in certain circumstances IP should be treated like an "essential facility" and that in those circumstances some mechanism of compulsory licensing or other curtailment of an IP owner's right be imposed.[92] Interestingly, the *Competition Act* does contain a provision for such a circumstance (section 32). Accordingly, in the Canadian context, any competition issue arising from an IP owner's exercise of his right, whether or not aided by a TPM, can be addressed by way of that provision.

Conclusion

In undertaking this assessment, we note that the economic questions faced by the Bureau are no less challenging, and in many cases very similar to, those faced by competition law enforcers in the U.S. and Europe.[93] In matters of theoretical and empirical assessment, the Economic Policy and Enforcement Branch in the Bureau has the same work cut out for it as do the Bureau of Economics at the Federal Trade Commission or the Economic Analysis Group in the U.S. Department of Justice's Antitrust Division. The Canadian competition law and policy community within and outside the Bureau can and should realize the potential leadership it can offer internationally to the extent that it can offer solutions to the questions we consider here. Recognizing this, we

are especially pleased to conclude by noting the Bureau's support for active engagement in these issues by the many Canadian economists with worldwide reputations in this field.[94]

Notes

* The views expressed here are solely those of the authors, and do not necessarily reflect the views of the Competition Bureau, the Commissioner, or any of the Bureau's staff. We thank Jeffrey Church and Richard Elliott for comments and providing the opportunity to prepare this article. Errors are the sole responsibility of the authors.

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[1] We also note that the views here do not necessarily represent those of other economists at the Bureau; they are absolved from error as well.

[2] Sheridan Scott, "Competition Bureau: Progress and Priorities" (Presented at the Canadian Bar Association Annual Conference on Competition Law, Gatineau, Quebec, Sept. 28, 2006) available at http://www.competitionbureau.gc.ca PDFs SpeechFall CBAConference_06-09-28e.pdf.

[3] Competition Bureau, "About the Bureau: Our Organization" http://www.competitionbureau.gc.ca/internet/ index.cfm?itemID=125&lg=e.

[4] *Commissioner of Competition v. Canada Pipe Co. Ltd.*, 2006 FCA 233 [*Canada Pipe*] available at http://decisions.fca-caf.gc.ca/en/2006/2006fca233/2006fca233.html.

[5] The U.S. Department of Justice (USDOJ) and Federal Trade Commission (FTC) are in the process of holding a series of hearings on single-firm conduct, addressing questions that would fall under the "abuse of dominance" category in Canadian competition law. Federal Trade Commission, "Public Hearings: Federal Trade Commission and Department of Justice Hearings on Section 2 of the Sherman Act: Single-Firm Conduct As Related to Competition" http://www.ftc.gov/os/sectiontwohearings/index.htm. (One author, Brennan, gave a statement in the hearing on "predatory buying" http://www.ftc.gov/os/sectiontwohearings/docs/BrennanDOJFTCSec2statement.pdf.). The European Commission is currently reviewing public comments on its draft guidelines for enforcing its Article 82 provisions on abuse of dominance. European Commission, DG Competition, "Article 82 Review," http://ec.europa.eu/comm/ competition/antitrust/others/ article_82_review.html.

[6] Even a monopolist profits by giving buyers what they most prefer; it just charges a high price for it.

[7] Timothy Muris, "Principles for a Successful Competition Agency" (2005) 72 University of Chicago Law Review 165, especially at 173-76.

[8] George Akerlof, "The Market for Lemons: Quality Uncertainty and the Market Mechanism" (1970) 84 Quarterly Journal of Economics 488; Joseph Stiglitz, "The Causes and Consequences of the Dependence of Quality on Prices" (1987) 25 Journal of Economic Literature 1; A. Michael Spence, *Market Signaling: Information Transfer in Hiring and Related Processes* (Cambridge, MA: Harvard University Press, 1974). It is no accident that these three shared the Nobel Memorial Price for Economics in 2001.

[9] The problem is not that information is imperfect, but that it is systematically uneven. If sellers are just as ignorant as buyers are about relevant information, markets can work just fine, as asset, contract and insurance markets illustrate daily. It is when one side knows something the other does not that a market can wither away.

Asymmetric information can also cause markets to fail if buyers have information sellers lack. Lending or insurance markets may fail when borrowers or insurance customers know their risk of loss but lenders or insurers do not. The price would reflect the average risk, which may be a higher price than the low risk buyers would pay. These low cost customers drop out of the market, raising the average risk and cost, thus raising the price, setting up a cycle in which the market may shrink or disappear.

[10] *Commissioner of Competition v. Sears Canada, Inc.* (2005), 37 C.P.R. (4th) 65. The key line was when the economist, after noting that the U.S. does not bring "ordinary selling price" claims, wondered if the Bureau thought Canadians were less intelligent than Americans.

[11] Thanks to Gwillym Allen and Ellen Creighton in the Criminal Matters Branch of the Bureau for very helpful suggestions in this section. Errors remain the responsibility of the authors.

[12] Robert Nozick, *The 2006 Annotated Competition Act* (Toronto: Thomson, 2005) at 94, citing *R. v. Nova Scotia Pharmaceutical Society*, [1992] 2 S.C.R. 606.

[13] *Competition Act*, s. 45(1).

[14] Nozick, *supra* note 12 at 95, citing *R. v. Clarke Transport Canada, Inc.* (1995), 64 C.P.R. (3d) 289.

[15] See *supra* note 12.

[16] Scott Hammond, "Antitrust Sentencing in the post-*Booker* Era: Risks Remain High for Non-cooperating Defendants" (Presented at the American Bar Association Spring Antitrust Section Meeting, Washington, DC, March 30, 2005) available at http://www.usdoj.gov/atr/public/speeches/208354.pdf

[17] For a discussion of the history of criminal enforcement in Canada and concerns about the adequacy of criminal penalties, particularly for blatant cartels, see Sheridan Scott, "Criminal Enforcement of Anti-Trust Laws – the U.S. Model: A Canadian Perspective" (Presented at the 33rd Annual Conference on International Antitrust Law & Policy, Fordham Law School, New York, NY, Sept. 14, 2006). Although Commissioner Scott's paper covers and provides further detail and elaboration on the ideas in this section of this paper, the disclaimer in the text continues to apply.

[18] William Landes, "Optimal Sanctions for Antitrust Violations" (1983) 50 University of Chicago Law Review 652.

[19] We abstract from the discussion issues of the degree to which the harms borne in any particular case should be multiplied to reflect that not all violations are detected. On the general theory, see Gary Becker "Crime and Punishment: An Economic Approach" (1968) 76 *Journal of Political Economy* 169. For its application to cartel behaviour, see John M. Connor and Robert H. Lande, "How High Do Cartels Raise Prices? Implications for Reform of the Antitrust Sentencing Guidelines" (American Antitrust Institute Working Paper, April 20, 2005) available at http://ssrn.com abstract=787907.

[20] Damages equalling the "net harm to others" allow a "rule of reason" analysis, at least in part. Imposing damages equal to a net harm to others shifts the cost-benefit test in a rule of reason test from the court to the defendant. It can make that test internally, subtracting the net harm to others from the net benefit to itself to make the decision only if the net benefits outweigh the net costs. To the extent that the rule of reason calls for a direct cost-benefit test, Landes's rule will give the outcome of a rule of reason case, even if not otherwise explicit in the jurisprudence, in the sense that a practice passing such an analysis would be adopted. However, unlike a U.S. rule of reason case, the defendants would still be liable for the net harm to others they cause.

[21] We will turn below to the definition of "anticompetitive act" as one that injures competitors, as set out in *Canada Pipe*, *supra* note 4.

[22] Nozick, *supra* note 12 at 249-59, discussing *Canada v. Superior Propane, Inc.* (2001) 11 C.P.R. (4th) 289.

[23] The phrases in quotes are from section 96 of the *Competition Act*, which says that the Competition Tribunal shall not block a merger when it would likely lead to "gains in efficiency that will be greater than, and will offset, the effects of any prevention or lessening of competition."

[24] Gregory Werden & Marilyn Simon, "Why Price Fixers Should Go To Prison" (1987) 32 Antitrust Bulletin 917. This argument especially holds as the optimal fine may be very large in any individual case because of a need to multiply it by N if only 1 out of N violators are caught. See references in *supra* note 19.

[25] Richard Posner, "An Economic Theory of the Criminal Law" (1985) 85 Columbia Law Review 1193.

[26] In practice, penalties should not be infinite, but for separate reasons. Within economics, infinite penalties eliminate the possibility of marginal deterrence, e.g., allowing greater penalties for more severe actions that might follow the initial violation. Outside economics, a sense of ethical proportionality may discourage huge penalties for relatively trivial crimes, even if the market is available as a ready alternative. Not least of the mitigating concerns is that even with high burdens of proof, there remains some risk that the innocent would be punished, and high penalties exacerbate the costs of that error.

[27] The supply curve of the good slopes upward because the marginal cost of production increases with the quantity of goods sold. Below, we note that this assumption need not hold in a fairly wide range of circumstances.

[28] If the relevant geographic output market is the same as the relevant geographic input market, e.g., the monopsonist sells only in the same area in which it buys labour, one might expect that it is also a monopolist in the output market. Otherwise, presumably its competitors in that same geographic area would also be competing for inputs (e.g., local labour). The presence of those competitors would reduce or eliminate the ability of a single firm to hold down the input price (e.g., wages) through its own decision to purchase less of that input. One can imagine exceptions to this scenario, however it is not a requirement for monopsony.

[29] Competition Bureau, *Merger Enforcement Guidelines* (2004) (MEGs), available at http://www.competitionbureau.gc.ca/internet/index.cfm?itemID=1245&lg=e, at 2.4, note 10.

[30] Under a consumer welfare standard, monopsony could be acceptable. Monopsony by consumers would, by definition, maximize the welfare of consumers, in that the gains from driving down the price they pay would outweigh, for them, the losses from reducing purchases in order to achieve that price reduction. By a total welfare standard, the losses to the victims of consumer monopsony would exceed the gains to the consumers. Ken Heyer, "Welfare Standards and Merger Analysis: Why Not the Best"

(Autumn 2006) 2 Competition Policy International 29 at note 28. Whether one would prosecute a consumer buying collective with monopsony market power thus depends on one's welfare standard.

[31] Clifford Winston, "Economic Deregulation: Days of Reckoning for Microeconomists" (1993) 31 Journal of Economic Literature 1263.

[32] Entry by one technology that displaces much of the use of another need not mean that the market includes both. Automobiles displaced bicycles and horses, but that doesn't imply that relevant markets for bicycles include cars.

[33] Timothy Brennan, "Do Easy Cases Make Bad Law? Antitrust Innovation or Missed Opportunities in *U.S. v. Microsoft*" (2001) 69 George Washington Law Review 1042.

[34] Competition Bureau, "Acquisition of Famous Players by Cineplex Galaxy" (Technical Backgrounder, July 7, 2005) available at http://www.competitionbureau.gc.ca/internet/index.cfm?itemID=1921&lg=e.

[35] The Bureau has announced that health care is a priority sector to advocate for increased competition. See *supra* note 2.

[36] Richard Dagen & Dan Richards, "Merger Theory and Evidence: The Baby-Food Merger Reconsidered" (Department of Economics, Tufts University, 2006) available at http://ase.tufts.edu/econ/papers/200602.pdf.

[37] Matthew Baker & Pamela Schmidt, "Mergers with Quality Differentiated Goods" (U.S. Naval Academy Department of Economics Working Paper 2004-01, 2004) discuss a model of differentiated products that may be substitutes or complements, but with identical log-linear demands. They find that welfare tends to but need not fall if the products are substitutes.

[38] For example, one might imagine a merger among movie theatres that keeps the theatres open but might change the quality of the seating or projection. In Dagen & Richards (2006), *supra* note 36, the assumption is different, that a merger of baby food producers would lead to a single quality level rather than continue to make both a higher and lower quality brands.

[39] Carl Shapiro, "Mergers With Differentiated Products" (American Bar Association, Washington, DC, Nov. 9, 1995) available at http://www.usdoj.gov/atr/public/speeches/shapiro.spc.htm.

[40] For simulation results illustrating this effect, see Amit Kumar Gandhi, et al., "Post-Merger Product Repositioning" (Vanderbilt Law & Economics Working Paper No. 05-19, June 20, 2005) available at SSRN: http://ssrn.com/abstract =766845. They note that the increased difference effect can mitigate welfare losses from the merger by, in effect, increasing product variety.

[41] For the responses to the added distance effect, see *ibid.*

[42] *Ibid.* A complete analysis would also account for synergies that might lead to lower costs of producing quality and thus higher quality levels for both firms.

[43] *Canada Pipe*, *supra* note 4.

[44] *Ibid.* at ¶¶26, 69. We leave aside issues of what it takes for a set of acts to constitute a practice under section 79(1)(b).

[45] *Ibid.* at ¶66.

[46] The apparent opposite phrase, "objective intent," seems an oxymoron. Is "subjective intent" what a person thought he wanted to do, and "objective intent" what he really wanted to do?

[47] *Canada Pipe*, *supra* note 4 at ¶71.

[48] *Ibid.* at ¶72.

[49] *Ibid.* at ¶¶35-44.

[50] See Timothy Brennan, "Saving Section 2: Reframing Monopolization Law" (AEI-Brookings Joint Center for Regulatory Studies Related Publication 05-27, 2005) available at http://www.aei-brookings.org/admin/authorpdfs/ page.php?id=1202, esp. 9-14.

[51] *Commissioner of Competition v. Canada Pipe*, 2005 Comp. Trib. 3 (Feb. 3, 2005), ¶¶116-117, available at http://www.ct-tc.gc.ca/CMFiles/CT-2002-006_0079b_38OGR-8172005-9774.pdf, cited in *Commissioner of Competition v. Canada Pipe*, 2006 FCA 236 (Jun. 23, 2006), ¶26, available at http://decisions.fca-caf.gc.ca/en/2006/ 2006fca236/2006fca236.html. Canada Pipe's request for leave to appeal the FCA's decision was refused by the Supreme Court of Canada on May 10, 2007. The Competition Tribunal must now reconsider the case in accordance with the decision of the FCA.

[52] *Canada Pipe*, *supra* note 4 at ¶37.

[53] In U.S. antitrust law, a monopolization claim requires prior monopoly power as a prerequisite. "The offense of monopoly under section 2 of the Sherman Act has two elements: (1) the possession of monopoly power in the relevant market and (2) the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a superior product, business acumen, or historic accident." *U.S. v. Grinnell Corp.* 384 U.S. 563, 570-71 (1966).

[54] This section incorporates an analysis of bundling sketched in Brennan, *supra* note 50 at 27-29.

[55] *LePage's v. 3M*, 324 F.3d 141 (3rd Circ. Pa., 2003), *cert. Denied* 124 S. Ct. 2932 (2004), involved discounts that 3M offered to retailers for carrying its version of unbranded (house brand) transparent adhesive tape. LePage's, a competing tape supplier, claimed that these bundled discounts were exclusionary, enabling 3M to maintain its market power in tape. Other cases involving

bundled discounts between manufacturers and "dealers" include *SmithKline Corp. v. Eli Lilly and Co.*, 427 F. Supp. 1089 (D.C.E.D. Penn. 1976), aff'd., 575 F.2d 1056 (3rd Circ. 1978), cert. denied 439 U.S. 838 (1978) and *Ortho Diagnostic Systems, Inc., v. Abbott Laboratories, Inc.* 920 F. Supp. 455 (D.C.S.D. N.Y. 1996).

[56] The Supreme Court declined to review *LePage's* after an *amicus* brief filed jointly by the U.S. Department of Justice and Federal Trade Commission advising that review of the Court of Appeals decision in favour of LePage's would be premature. U.S. Department of Justice, Brief for the United States as *Amicus Curiae*, *3M Co. v. LePage's*, Inc., U.S. Supreme Court, No. 02-1865 (May 28, 2004), available at http://www.usdoj.gov/atr/cases/f203900/203900.pdf.

[57] Bruce Kobayashi, "The Economics of Loyalty Discounts and Antitrust Law in the United States" (Autumn 2005) 1 Competition Policy International 115, especially at 123-28.

[58] The current legal standard in the U.S. is discussed in *Brooke Group, Ltd. v. Brown and Williamson Tobacco Corp.*, 509 U.S. 209 (1993). For an argument for a cost-based test on the grounds of preventing over-deterrence, see Einer Elhauge, "Why Above-Cost Price Cuts to Drive Out Entrants Are Not Predatory – and the Implications for Defining Costs and Market Power" (2003) 112 Yale Law Journal 681.

[59] Peter Greenlee, David Reitman & David Sibley, "An Antitrust Analysis of Bundled Loyalty Discounts" (Economic Analysis Group Discussion Paper No. 04-13, 2004) available at http://ssrn.com/abstract=600799, does not make the first error, but does make the second. Their model essentially has a monopolist in one market charging high prices for another as a device for charging a lump-sum up front fee for the monopoly service. The welfare effects, as with many price discrimination models, are ambiguous.

[60] The increased cost for an explicit exclusive dealing contract would be the penalty for breach. If that breach penalty is the lost profit to the excluding firm, it will be the difference between that firm's wholesale price and it's short run marginal cost. To obtain distribution, the competitor is not competing against the firm's wholesale price, but as if that firm were charging a price equal to its marginal cost (Brennan, *supra* note 50 at 28). This introduces a cost-based criterion for evaluating bundles, but only if a bundle has to be as exclusionary as an explicit contract to be competitively significant. In general, the focus should be on the effective price of distribution, not the excluder's cost. The upfront cost of the bundle is irrelevant, as is the price paid to retailers to sign exclusive dealing contracts. The issue should not be profit sacrifice but competitive effect. If one would be concerned about a merger of distributors that raised distribution prices by a SSNIP, one presumably should be as concerned about a bundle discount program that accomplishes the same end.

[61] For the Bureau's views on criteria for forbearance, see Competition Bureau, "Evidence of the Commissioner of Competition" (CRTC, Telecom Public Notice CRTC 2005-02, Forbearance of Regulation of Local Exchange Services, June 22, 2005) available at http://www.crtc.gc.ca/public/partvii/2005/8640/comm_comp/050622.zip. For its views on abuse of dominance in telecommunications, see the draft Information Bulletin on the Abuse of Dominance Provisions as Applied to the Telecommunications Industry (Sept. 26, 2006), available at http://www.competitionbureau.gc.ca/internet/index.cfm?itemID=2180&lg=e, which was issued for public comment and is expected to be released in final form by the end of June 2007.

[62] For elaboration on these points, see Timothy Brennan, "Fair Trade or Imperialism: Importing 'Merger Guidelines' into (De)Regulatory Policy" (July 7, 2006) available at http://ssrn.com/abstract=915842.

[63] MEGs, *supra* note 29. Regulation can raise concerns when a merger involves a combination of a regulated firm with a firm operating in a vertically related regulated market. Timothy Brennan, "'Vertical Market Power' as Oxymoron: Horizontal Approaches to Vertical Antitrust" (2004) 12 George Mason Law Review 895.

[64] The usual 5% test embodied in the SSNIP is arbitrary in at least two dimensions. First, the relevant motive for policy should be welfare loss, not simply higher prices. A merger in two sectors creating a SSNIP can lead to significantly different welfare losses based on size of the market, elasticity of demand and the extent of prior market power.

Second, competitively irrelevant transactional structures can change the denominator and thus whether a predicted price increase meets a SSNIP standard. Consider the pipeline example discussed above under the heading *Monopsony*. In gas, pipelines typically purchased gas at the wellhead and then resold it to local distribution companies. A 5% price increase in the gas pipeline sector would be calculated over both the gas price itself plus the implicit transportation cost. In oil, on the other hand, pipelines provide a transportation service to shippers, and a 5% price increase would be based on just the transportation cost. Economically identical mergers in the pipeline sector could have a price effect exceeding a SSNIP for oil transportation but be less than a SSNIP in retail gas prices.

[65] *Verizon v. Trinko*, 540 U.S. 398 (2004) [*Trinko*].

[66] The *Trinko* decision offers a fourth, that the doctrine and antitrust overall is unnecessary in industries where the putative essential facility is regulated. This is a more problematic assertion, particularly when a regulated firm can abuse its control over access to the regulated service or the allocation of costs to reduce competition in related unregulated markets. Timothy Brennan,

"*Trinko* v. *Baxter*: The Demise of *U.S. v. AT&T*" (2005) 50 Antitrust Bulletin 635.

[67] *U.S. v. Terminal Railroad Assn. of St. Louis*, 224 U.S. 383 (1912).

[68] *Trinko*, *supra* note 65.

[69] *Aspen Skiing Co. v. Aspen Highlands Skiing Corp.*, 472 U.S. 585 (1985).

[70] This is from *U.S. v. E.I. du Pont de Nemours and Co.*, 351 U.S. 377 (1956). The Supreme Court wrongly found that du Pont had no monopoly because people turned to substitutes at the prices it was charging for Cellophane. Dennis Carlton & Jeffrey Perloff, *Modern Industrial Organization* (Glenview, IL: Scott Foresman and Co. 1990) 740.

[71] Accounting profit tests fare even worse. Franklin Fisher & John McGowan, "On the Misuse of Accounting Rates of Return to Infer Monopoly Profits" (1983) 73 American Economic Review 82.

[72] Lawrence White, "Wanted: A Market Definition Paradigm for Monopolization Cases" (New York University, Center for Law and Business, Working Paper No. 99-002, 1999) available at http://ssrn.com/abstract=164869.

[73] For a discussion of the erroneous identification of price-cost margins in assessing market power in the electricity sector, see Timothy Brennan, "Preventing Monopoly or Discouraging Competition? The Perils of Price-Cost Tests for Market Power in Electricity" in Andrew N. Kleit, ed., *The Challenge of Electricity Restructuring* (Lanham, MD: Rowman and Littlefield, 2006).

[74] U.S. Department of Justice, Competitive Impact Statement, *U.S. v. SBC Communications, Inc, and AT&T Corp.*, D.C.D.C. Civil Action No.: 1:05CV02102 (EGS), Nov. 16, 2005, available at http://www.usdoj.gov/atr/cases/f213000/213026.pdf.

[75] CRTC, "Forbearance from the regulation of retail local exchange services" (Telecom Decision CRTC 2006-15, April 6, 2006) at ¶ 141, available at http://www.crtc.gc.ca/archive/ENG/Decisions/2006/dt2006-15.htm.

[76] The geographic market question to ask for washing machines, for example, is not whether consumers would take their laundry next door, but whether (say) Asian appliance manufacturers compete with those based in North America. If reluctance of telecommunications users to leave their home or office to make calls means that they want service at a particular location, that should be considered part of the definition of the relevant product, as a dimension of the type of services carriers serving a broad geographic area provide.

[77] One might as well ask if an office building should allow multiple providers of air conditioning service, so each office's tenants have a choice of their air conditioning provider.

[78] This could be done at undepreciated book value to avoid expropriation of those ILEC assets.

[79] The Bureau's partners are the Canadian Intellectual Property Office and the Marketplace Frameworks Policy and Microeconomic Policy Branches of Industry Canada.

[80] The book is available through the University of Calgary Press, http://www.uofcpress.com/1-895176/1-895176-97-2.html.

[81] For a comprehensive discussion of TPMs see I. Kerr, M. Alana & C. Tacit, "Technological Protection Measures: Part I" (Copyright Policy Branch, Heritage Canada) available at http://www.pch.gc.ca/progs/ac-ca/progs/pda-cpb/pubs/protection/index_e.cfm.

[82] See Electronic Frontier Foundation, *Unintended Consequences: Seven Years under the DMCA*, vol. 4 (April 2006) available at www.eff.org.

[83] 504 U.S. 541 (1992).

[84] For different viewpoints, see S. Borenstein, J. Mackie-Mason & J. Netz, "Antitrust Policy in Aftermarkets" (1995) 63 Antitrust Law Journal 455; Carl Shapiro, "Aftermarkets and Consumer Welfare: Making Sense of Kodak" (1995) 63 Antitrust Law Journal 483; D. Carlton, "A General Analysis of Exclusionary Conduct and Refusal to Deal: Why *Aspen* and *Kodak* Are Misguided" (2001) 68 Antitrust Law Journal 659.

[85] D. Goldfine & K. Vorrasi, "The Fall of the *Kodak* Aftermarket Doctrine: Dying a Slow Death in the Lower Courts" (2004) 72 Antitrust Law Journal 209.

[86] The U.S. *Microsoft* case may be a rare example, with the variation that Microsoft could prevent competing browsers from evolving not into a competing operating system but into a separate application platform. See Brennan, *supra* note 33.

[87] This may explain why printers seem to cost not much more than the ink cartridges one needs to purchase later on; in some cases printers are virtually given away with computers.

[88] That consumer welfare overall might be greater with greater initial prices and lower aftermarket prices suggests that durable good suppliers might want to be able to promise consumers that they will not re-integrate into aftermarket services and exploit lock-in. The proper vehicle for making such commitments is contract law, not competition law. If a supplier reneges on a contractual promise to maintain aftermarket competition that buyers had expected to keep service prices low, those buyers could sue for contract breach.

[89] Such a belief seems a predicate of the "open source" movement, namely that IP rights inhibit rather than promote innovation.

[90] Such arguments are presented and critiqued in T. Barnett, "Interoperability Between Antitrust and Intellectual Property" (George Mason Law School Symposium: Managing Antitrust Issues in a Global Marketplace, Washington, DC, Sept. 13, 2006) available at http://www.usdoj.gov/atr/public/speeches/218316.htm.

[91] Consistent with the perspective on bundle rebates set out above under the heading *Bundle Discounting*, Apple may be substantially lessening competition if it has exclusive distribution agreements with a monopoly share of a relevant market for music. However, such concerns do not appear to be part of the arguments surveyed by Barnett, *ibid.*

[92] In that regard, our analysis of essential facilities in telecommunications, set out above under the heading *Market Definition for Dominance*, may be pertinent.

[93] One author (Brennan) served as a full and then part time staff economist with the U.S. Antitrust Division through 1998 and as a staff consultant to the Bureau of Economics of the Federal Trade Commission in 2003-2005. In the past year, he has given presentations at the FTC and the Office of Fair Trading, the United Kingdom's competition enforcement agency, in London.

[94] During 2006, the Bureau supported conferences of leading Canadian and U.S. economists sponsored by its Economic Policy and Enforcement Branch (Ottawa, ON, April 2006) and the Sauder School of Business of the University of British Columbia (Kelowna, BC, July 2006).

THE HYPOTHETICAL MONOPOLIST APPROACH RECONSIDERED – PART II

By: Lawrence P. Schwartz

As discussed previously, the 2004 changes to the Competition Bureau's *Merger Enforcement Guidelines* (the "2004 Canadian MEGs") present a clearer and more directly economic conception of the hypothetical monopolist approach to market definition.[1] The revised treatment also eliminates some confusing wording that suggested important differences from the approach in the U.S. *Horizontal Merger Guidelines* and thereby promotes the same type of analysis that is followed in the United States and, increasingly, in Europe.

As indicated in *Part I*, the hypothetical monopolist approach appears to delineate narrow product markets. This second article on the hypothetical monopolist approach discusses the role attributed to the price-cost margin in justifying broader product markets and some of the enforcement agencies' considerations in adopting the 5% SNIP test (significant and non-transitory increase in price) as stated in their guidelines. Despite the improved presentation of the hypothetical monopolist approach in the 2004 Canadian MEGs, there are still some unresolved questions about the approach and considerable confusion on key issues of fundamental theory and practice in market definition in merger review. Some of these issues have become quite controversial, particularly in connection with the method of "critical loss analysis", and appear to indicate divergence of opinion between the U.S. enforcement agencies.

At the outset, however, it needs to be restated that the hypothetical monopolist approach provides a set of basic economic principles intended to guide the process of identifying substitutes in the market definition process. Proponents believe that by applying conventional economic theory in this way, mistakes can be avoided and the process cleansed of the confusion and result-oriented advocacy that characterized earlier efforts.

At base, the current controversy concerns the role to be accorded to basic economic theory in market definition. Pending resolution of the outstanding issues, the hypothetical monopolist approach should be retained albeit with a higher SNIP test.

Why Narrow Product Markets?

As noted previously, product markets are delineated around each of the products of the merging parties by reference to the behaviour of a hypothetical monopolist in a thought experiment.[2] If, for one of those products, a hypothetical monopolist would impose a SNIP, then substitutability in demand is sufficiently low that the product market is limited to that product. If not, then the product market must be broadened to include a good substitute and the question is posed again.

The agency guidelines establish the pre-merger price in the market as the base for the price increase that a monopolist would impose, as this is usually the best estimate of the price that would prevail in the future but for the merger. At that base price, the more elastic (price-sensitive) is the demand for the product[3], the smaller is the price increase that a monopolist would impose. As discussed in *Part I*, the criterion is the "critical demand elasticity" that is determined by a formula linking the SNIP and the extent of any margin of pre-merger price

over marginal cost: if product demand is more elastic than this critical level, a monopolist would not impose a SNIP and a broader product market is warranted for the purpose of merger review.

To the extent that this pre-merger price is elevated over marginal cost, a monopolist would impose a lower price increase because the prevailing price is already some distance toward the monopolist's ideal profit-maximizing price.[4] On this basis, it will be in the interest of the merging parties to demonstrate the existence of these price-cost margins.

As shown in *Part I*, under linear demand, constant costs and a SNIP of 5%, the critical demand elasticity at the pre-merger price is 10 when that price is competitive, so the product demand elasticity must exceed 10 to support a broader market. Since product elasticities are generally not this large, it will be difficult for the merging parties to justify a broader market. However, if the price-cost margin is 30% then, by application of the formula, the critical elasticity falls to 2.5.[5] Since the introduction of the 1992 U.S. Guidelines, the market definition literature has stressed the existence of pre-merger price-cost margins.[6] The demonstration of these margins is particularly significant in, and indeed central to, the technique of "critical loss analysis".[7]

Merging parties should therefore pay attention to the gap between price and marginal cost. Katz & Shapiro indicate gross margins in the 50% range in some industries; Werden suggests that price-cost margins in "real-world antitrust matters" are commonly in the 40-70% range.[8] Margins at these levels can be strong indicators that the hypothetical monopoly price increase would not exceed the SNIP.

Plausible Justifications for Existence of Margins

Whether the product market is delineated on the basis of critical loss or critical demand elasticity evidence, the burden falls on the merging parties to demonstrate the existence of margins in their industry. Margins are generally expected because few industries exhibit strict marginal-cost pricing, and yet this does not give rise to antitrust concerns. Merging parties will want to find plausible justifications for the claims of significant margins and, while this would appear to be an easy task, it is clear that enforcement agencies will treat claims sceptically.

The competition authority will not accept existing market power in the industry due to coordinated behaviour among industry participants. If the elevated pre-merger price is due to such anti-competitive market structures, the agency will reject claims to a broader market. Indeed, the 1992 U.S. Guidelines state that the agency will adopt the competitive price as the base price.[9]

A more plausible explanation for the existence of margins is the presence of significant fixed costs in the industry. Note that not all fixed costs will qualify. Werden refers to industries with large sunk investments (such as advertising) or with large sunk product development costs.[10] A firm's gross profit margin must be large enough to cover such costs and still provide a normal (i.e. competitive) long-run rate of return to shareholders.

In this long-run equilibrium, however, conventional economic theory notes that fixed costs can be varied and, accordingly, margins would not be due to such costs.[11] Thus, to support the argument that certain fixed costs are a valid source of margins, it will be important to identify costs that persist despite the long-run tendency.[12]

Another plausible reason for price-cost margins is that producers have been able to differentiate their products and can set a price above their marginal costs without losing significant sales to competitors. In monopolistic competition, such producers adopt average-cost pricing but they do not earn supra-competitive profits in the long-run. Katz & Shapiro indicate that large margins are found in computer software and pharmaceuticals due to large fixed costs and/or highly differentiated products.[13]

Merging parties may wish to demonstrate significant pre-merger margins in order to support claims for broader product markets. While the formula for the critical demand elasticity indicates that higher margins support broader product markets in merger review, recent thinking suggests the opposite.

The Lerner Index: Linking Margins and Demand Elasticity[14]

There is an important distinction between the elasticity of demand faced by an individual firm in an industry and the overall market elasticity of demand. For example, an individual corn producer faces essentially infinitely high demand elasticity: any attempt to raise the price beyond the prevailing price will result in a loss of all sales to other producers.

The relationship between the corn producer's price-cost margin at its profit-maximizing level of output and this demand elasticity is given by the Lerner Index:

$$\frac{P - C_i}{P} = \frac{1}{e_i}$$

where the industry price is P, marginal cost of the ith producer is given by C_i, and the elasticity of demand that governs the producer's behaviour is e_i.[15] This equation states that where the price-cost margin is very low, as in a competitive industry, the individual competitor, like the corn producer, faces highly elastic demand at the prevailing price.

However, the market demand for corn is much less elastic and has been estimated at 1.06. Thus, demand faced by a corn monopolist would be much less elastic than the demand faced by any individual producer.[16] This results from the observation that, in attempting a unilateral price increase, a firm loses sales to another competitor but a monopolist cannot.

This is a very general result. It is particularly relevant to a differentiated-product industry in which a producer's product differs to some extent from the products of its competitors. Now suppose that a manufacturer of such a product has significant price-cost margins of the type suggested above, say 40%. From the Lerner Index for that firm, its demand elasticity is 2.5 and, accordingly, the market demand elasticity faced by an industry monopolist must be even lower.

But we know that the more inelastic is the market demand, the greater is the ability of a monopolist to successfully impose a significant price increase. Thus, when delineating product markets in merger review, one may conclude, with Katz & Shapiro, that high margins are presumptively associated with narrower product markets rather than broader ones.[17]

A Contradiction?

At first, it appears that this conclusion contradicts the formula for the critical demand elasticity. Note, however, that the breadth of the product market in merger review is determined by the arbitrarily-established SNIP; one can have a broader (narrower) market simply by raising (lowering) the SNIP, regardless of the price-cost margin. There is no economic content in such a statement.

The formula for the critical demand elasticity is an expression of, and is derived from, the Lerner Index and, as an economic statement, says only that any pre-merger price-cost margin reduces the extent of the price increase that a hypothetical monopolist would impose in order to attain the profit-maximizing position described by the Lerner Index. All that can be said is that the monopoly price increase will be larger if product demand is relatively inelastic at the pre-merger price than if it is relatively elastic.[18]

Thus, for a given SNIP, the critical demand elasticity formula that is the basis for the hypothetical monopolist approach can support narrow product markets when pre-merger margins are high and market demand at the pre-merger price is relatively inelastic. It supports broad product markets when pre-merger margins are high and demand is relatively elastic. The latter case diminishes the strength of the Katz-Shapiro presumption that high margins imply narrow markets.

Implications for Critical Loss Analysis

"Critical loss analysis" is a procedure for delineating markets that purports to implement the hypothetical monopolist approach in the agency guidelines. As discussed in *Part I*, it is not entirely consistent with conventional theory and has come under strong scrutiny in the research literature. Yet it is widely used in the United States by merging parties and by economists in the U.S. Federal Trade Commission.[19]

Advocates of critical loss analysis take the position that the high pre-merger margins lead to broad product markets. Critics argue that this description is inconsistent with the conventional analysis of the firm described by the Lerner Index. In response, advocates deny the relevance of the Lerner Index:

> Theorists posit a relationship between profit margin and the firm level elasticity such that high margins will generally be linked to inelastic demand curves. This hypothesis exploits the Lerner Index associated with an equilibrium model of product differentiation. These results disappear in a market in which no clear relationship exists between the margin and the firm level elasticity.[20]

As the advocates of critical loss analysis appear to deny the applicability of the Lerner Index, they must also be denying conventional profit-maximization that is central to the theory of the firm. As the quote indicates, advocates regard the critics as "theorists"

Another point of interest is that advocates of critical loss analysis appear to be associated with the U.S. Federal Trade Commission whereas critics include current or past officials in the U.S. Department of Justice Antitrust Division.[21] That senior economists from the U.S. enforcement agencies differ significantly on the role to be accorded to conventional economic theory in market definition is a troubling development.

The current debate exposes the fundamental problem with critical loss analysis: being inconsistent with conventional economic theory, it is not, as purported, an expression of the hypothetical monopolist approach to market definition in the enforcement agencies' merger guidelines. This is not to say that it cannot be used as a tool for market definition; there is, after all, no requirement in law that conventional economic theory be the basis for that task. However, if conventional theory is not the basis for market delineation, one wonders what the appropriate basis is.

The SNIP: Current Status

The resulting problem is posed simply: ignoring margins, the hypothetical monopolist approach as currently described in the merger guidelines routinely delineates narrow product markets; the introduction of margins seems to exacerbate this result. On the other hand, critical loss analysis focuses on fixed costs and delineates broad markets.

The current state of knowledge can only be regarded as unsatisfactory. Pending the ultimate clarification of this debate, a higher SNIP would mitigate the problem.

At present, however, there is only limited scope for merging parties to argue that a larger price increase is appropriate for the SNIP. While "5% for at least one year" is indicated in the 2004 Canadian MEGs as the norm for the SNIP test[22], a significant price increase might be larger or smaller and depends on the circumstances. The market definition literature identifies two instances in which the U.S. enforcement agencies will divert from the 5% SNIP in merger review.[23]

First, merger review may indicate no competitive concern when the relevant market is delineated using the 5% test, but a serious concern at a slightly lower price increase. For example, suppose the merger would not be challenged under a 5% test, but would lead to a monopoly in a relevant market under a 4% price increase. In such cases, the agency is likely to apply the lower figure.

Second, whether a merger of firms A and B is deemed horizontal depends on the criterion for significance. As noted previously, merger review delineates markets around each of the products of the merging parties. Even where the products of the merging parties are similar, it is possible that the product of firm A is not part of the market delineated around the product of firm B using a 5% price increase; correspondingly, the product of firm B may not be part of the market delineated around the product of firm A. When both of these conditions obtain, the merger is not horizontal when evaluated at the 5% SNIP.

Suppose, however, that when the product markets are delineated with a 6% SNIP, the product of one of the merging parties is included in the market for the other.[24] There is an indication that the U.S. enforcement agencies would review the transaction under the 6% SNIP. This somewhat larger price increase reduces the critical demand elasticity only marginally.

Accordingly, neither of the scenarios in which the agencies will entertain a different SNIP test leads to a significantly broader definition of the product market. The plaintiffs' concern is therefore justified. Absent

agreement on the appropriate treatment of pre-merger margins, the use of a formula that produces a critical demand elasticity of 10 with a 5% SNIP requires modification.

A Higher SNIP?

The issue boils down to one of public policy. Since, under a 5% SNIP, merging parties can virtually never succeed in demonstrating broader relevant product markets, that test systematically favours the government. In response, it might be suggested that relevant product markets are, by definition, narrow, otherwise there would be no need for competition law. Such response challenges the basis of the adversarial system and, accordingly, some middle ground must be found to avoid the traditional criticisms of market definition.

One suggestion in this regard is that the agencies should routinely adopt a 10% SNIP. With this test, the formula produces a critical demand elasticity of 5 that, though it lessens the burden on the merging parties, will continue to be a stringent criterion.

The larger issue, however, is the disputed treatment of price-cost margins. Fuller discussion in the merger guidelines of what costs the agencies consider relevant is warranted. As long as the appropriate treatment of margins is unresolved, the enforcement agencies should abandon critical loss analysis in product market definition.

Notes

[1] See Lawrence P. Schwartz, "The Hypothetical Monopolist Approach Reconsidered – Part I" (2005) 22:2 Can. Comp. Rec. 96 [*Part I*]. Terms defined there carry forward to this article. The author thanks Professors Douglas West and Mel Fuss for comments on earlier drafts. He can be reached at lschwartz5205@rogers.com.

[2] This presumes that at least one product of one merging party is in the market delineated around a product of the other. If not, the merger is not horizontal; see below.

[3] Also referred to below as "market demand"

[4] Stated differently, the smaller price increase is due to the fact that at the elevated price, demand is generally more elastic than at the competitive price.

[5] The formula for the critical demand elasticity at the pre-merger price is $1/(m+2SNIP)$, where m is the price-cost margin. For m=0 and a 5% SNIP, the critical elasticity is 10. For m=0.3, the critical elasticity is 2.5.

[6] See G. Werden, "Four Suggestions on Market Delineation" (1992) Spring The Antitrust Bulletin at 115-116

[7] See Comments of Barry Harris, Federal Trade Commission and Department of Justice Joint Workshop on Merger Enforcement, February 17, 2004 at transcript 39-41 (available at http://www.ftc.gov/bc/mergerenforce/040217ftctrans.pdf).

[8] See M. Katz & C. Shapiro, "Critical Loss: Let's Tell the Whole Story" (2003) Spring Antitrust at 50; Gregory Werden, "Demand Elasticities in Antitrust Analysis" (1998) 66 Antitrust Law Journal at 390.

[9] United States Department of Justice and Federal Trade Commission, *Horizontal Merger Guidelines* (April 2, 1992) at ¶1.11. The 2004 Canadian MEGs, at ¶3.7, do not address this situation directly but indicate that the prevailing price will not always be used as the base.

[10] See Werden, *supra* note 6 at 116.

[11] Somewhat ambiguously, Katz & Shapiro write: "In the long run, gross margins must be large enough to cover what (in the short run are) fixed costs, or suppliers will lose money and exit the business", *supra* note 8 at 55 n. 7.

[12] To complicate matters further, Baumann & Godek identify m as the initial margin over short-run variable cost of the firm. See M. Baumann & P. Godek, "A New Look at Critical Elasticity" (2006) Summer The Antitrust Bulletin 327.

[13] See Katz & Shapiro, *supra* note 8 at 55.

[14] This section elaborates the discussion of Katz & Shapiro.

[15] For a differentiated products industry, each producer sets its own price, so the relevant price in the Lerner Index should be

written P$_1$

[16] By contrast, the demand elasticity of the individual corn producer has been estimated at 31,000. See D. Carlton & J. Perloff, *Modern Industrial Organization*, 2nd ed. (New York: Harper Collins, 1994) at 103.

[17] Katz & Shapiro state that this is a rebuttable presumption. *Supra* note 8 at 52.

[18] See note 4 *supra*.

[19] See M. Coate & J. Fischer, "A Practical Guide to the Hypothetical Monopolist Test for Market Definition" (2006) October Federal Trade Commission, Potomac Papers in Law and Economics 06-01.

[20] *Ibid.* at 15 n. 21. See also D. Scheffman & J. Simons, "The State of Critical Loss Analysis: Let's Make Sure We Understand the Whole Story" (2003) November The Antitrust Source at 1.

[21] Scheffman was formerly Director of the FTC's Bureau of Economics while Katz and Shapiro were formerly Deputy Assistant Attorneys General of the DOJ Antitrust Division.

[22] The 1992 U.S. Guidelines use 5% "lasting for the foreseeable future". *Supra* note 9 at ¶1.11.

[23] See Gregory Werden, "Market Delineation under the Merger Guidelines: A Tenth Anniversary Retrospective" (1993) 38 The Antitrust Bulletin at 529, n. 31 and 532-533.

[24] Because a monopolist of A's product would not impose a 6% price increase, thus leading to an expansion of the market. If, according to the procedures for expansion, the product of B is added to the market, the merger becomes horizontal under the 6% SNIP.