

Product Bundling in Communications Markets

An ABA Section of Antitrust Law Brown Bag Program (September 20, 2004)

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Editor's Note: Bundling is a hot-button issue in the telecommunications industry, particularly in the wake of the Third Circuit's en banc opinion in *LePage's Inc. v. 3M*, 324 F.3d 141 (3d Cir. 2003), cert. denied, 124 S. Ct. 2932 (2004), which held that bundled rebate programs can constitute monopolization even if the monopolist's prices are above its costs. In this ABA Section of Antitrust Law program, one academic and two business telecommunications experts offer practical and theoretical insights into why bundling, in the context of the telecommunications industry, may be the best of all outcomes for consumers. The discussion below is useful in considering bundling not only in the telecommunications industry, but generally in other industries as well.

—ANNE RODGERS

MARK DEL BIANCO: The issue of product bundling in communication markets is a very hot topic these days. It's not often you get a brown bag lunch co-sponsored by three separate committees of the Antitrust Section, but that is what we have today. This program is brought to you by the Committee on Computers and Internet (of which I am Co-Chair), the Communications Committee, and the Sherman Act Section Two Committee.

The trade press and business analysts, such as Legg Mason and The Precursor Group, have been writing about this trend for a long time. Just last Monday, the *Wall Street Journal* had a special section full of articles about changes in the communications market and the business reasons for and dangers around communication bundling.

The regulatory agencies are also taking an interest in this issue. In a speech last month in Aspen, Hew Pate, Assistant Attorney General for Antitrust, raised the issue of bundling in communications markets and discussed in some detail how changes in communications markets might affect the Antitrust Division's analysis of mergers or the way it conducts investigations. We have heard informally that the Federal Trade Commission has staffers examining communications, particularly cable bundling issues. The FCC has been considering communications product bundling

issues since at least the beginning of this year and has had outside experts, including Professor Nalebuff, who you are going to hear from in a minute, in to talk to their lawyers and economists about bundling issues. In its recent information request to the other wireless carriers in the Cingular/AT&T wireless case, the FCC asked for information about bundled offerings combining wireless and other communication services.

Our topic today is very timely, and we've assembled a panel of experts to help us sort things out. Our first speaker is Barry Nalebuff, the Milton Steinbach Professor of Economics and Management at the Yale School of Management. He has probably contributed as much as anyone to the academic and theoretical analysis of bundling issues in the past few years. He is an expert in game theory, and he has written extensively on its application to business strategy. He is co-author of *Thinking Strategically*, *Co-Opetition*, and most recently, *Why Not?* His current research focuses on the strategic and antitrust aspects of product bundling. His monograph on bundling prepared for the UK DTI is available on its Web site, <http://www.dti.gov.uk/economics/>. He was an expert for GE and Honeywell in the EU's investigation of the GE/Honeywell merger, as well as for the Australian Competition Commission in its case against Baxter. Barry is on the boards of Trader Classified Media and Bear Sterns Financial Products and is the Chairman and co-founder of Honest Tea, tea that tastes like tea.

In its recent information request to the other wireless carriers in the Cingular/AT&T wireless case, the FCC asked for information about bundled offerings combining wireless and other communication services.

Our second speaker will be Robert Zastrow, the Assistant General Counsel for Antitrust at Verizon Communications. His work has included civil jury trials, counseling, particularly in the high-speed data markets, and advocacy of the company's position on mergers and acquisitions before the DOJ. Before joining Verizon he was an Assistant Chief of the Civil Task Force at the Antitrust Division where his cases included *Microsoft I* and an analysis of the *LePage's v. 3M* case when it was in the district court. Before that he was a litigation partner at Stroock & Stroock & Lavan in New York.

Our third speaker is Marc Lawrence-Apfelbaum. Marc is the Executive Vice President and General Counsel of Time Warner Cable, the nation's second largest cable systems operator. He joined TWC in 1989 as Assistant General Counsel, became Senior Vice President and General Counsel in 1996 and an Executive Vice President in January 2003. In addition to its basic cable operations, TWC has been at the forefront of developing new broadband technologies and programming, including the Road Runner cable modem service and various local news channels, including New York One News and seven other 24-hour local news channels around the country. Marc has been active in dealing with legal issues arising from new ventures as well as with the issues relating to TWC's general cable operations.

I expect that our speakers will explore the business and strategic reasons, both competitive and potentially anticompetitive, for bundling in the communications industry. I am particularly hoping that they will talk about whether there are reasons for bundling in telecom markets that are not obvious to people who aren't familiar with those specific markets or to antitrust lawyers who are not steeped in communications jargon.

Barry will begin with a presentation about the theoretical aspects of the issues.

BARRY NALEBUFF: Given the ad hoc nature of the recent cases that we've seen (e.g., *LePage's*), I hope to convince this room of practitioners that there is nothing so practical as a good theory. What you really need in terms of guidance in this world is to understand the motivations for bundling and have a model for it. I will give you a few models. When it comes to bundling, it's "different horses for different courses." There is no single explanation of why you bundle. It depends on the specific circumstance. I'm going to focus on three motivations:

—MARK DEL BIANCO

(1) The ability to actually leverage monopoly. The notion here is that if you have a monopoly, it is in fact possible to earn more money and to extend that monopoly into a competitive market. In other words, I'm going to show you why the sort of Chicago School argument that you've known and loved isn't really right for most of the world.

(2) I'm going to explain why bundling is different than predatory pricing. Bundling leads to the same outcome in terms of exclusion and foreclosure, but it does so much more neatly than predatory pricing in the sense that it can do so at no cost. And, in this sense, the plaintiff's arguments in *LePage's* were correct, in theory. That is, plaintiffs claimed that 3M could exclude them from the market without selling below cost. While I think the idea of no-cost predation is correct in theory, I'm not convinced that *LePage's* showed that this theory actually applied to the facts of their case.

(3) Last, I'm going to talk about how variety bundles actually provide a competitive advantage.

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I want to start with a caveat. While bundling is relevant to many industries and antitrust cases, I'm not so sure it's relevant to communications. That's because the anticompetitive issues associated with bundling generally require: (a) a monopoly, and it's not clear where there's a monopoly in the communications world today; (b) variable consumption (that is, consumption that is not just one or zero, but one or zero seems to be the typical case in communications); and, (c) only one firm that can bundle, which doesn't seem to describe the telecom world.

Indeed, one of the results we'll talk about is the fact that while a firm that bundles has an advantage against firms that don't, if the market ends up with bundle vs. bundle competition, that is the most procompetitive outcome of all. If what we see in telecom is bundle vs. bundle, we have every reason to think that that's going to be the best outcome for consumers.

—BARRY NALEBUFF

Monopoly Leveraging. Let me first explain how it is that you go about leveraging monopoly. Our simple model is that there's a monopoly in "A" and a competitive market in "B." The Chicago School story says leverage is not possible in a world where you only consume exactly one unit of "A" and one unit of "B." So, let's leave that world and focus on the case where consumption is variable. If the firm cuts the price of "A" you'll consume a good bit more of it, and the same thing for "B."

Furthermore, I want to create a bundle that's optional. That is, I'm not going to force the person to buy the bundle. I'm going to keep the old price of "A" and the old price of "B" available in the market. The monopolist in A is going to make a deal for the customers, which is the following: I'll give you a discount on A if you agree to buy my B at a slight price premium. If the monopolist has priced A optimally, giving a slight discount on A doesn't hurt because its profits have been maximized at its monopoly price "m." So, if it charges $m-1$ vs. m , it's going to make about the same amount of money.

On the other hand, consumers are really much happier. They like the fact that they've been offered a dollar discount. That's not a little effect to them, that's a big effect. In return for giving them the dollar off A, they are happy to give the monopolist 10 cents more on B. And so, the monopolist makes a little extra money on B, consumers are happier with the discount A, even with the slight offset on B. The end result is that the monopolist has made more money, consumers are better off, but—and here's the key issue—the monopolist in A has foreclosed all the other players in the B market.

In a static sense, this is a Pareto improvement in that everyone's better off. But you may worry in a dynamic sense—if you think that firms in the B market were going to be potential entrants into the A market, or that the A monopolist can now create a monopoly in the B market. Both of those are concerns to a dynamic perspective in that the monopoly in A has leveraged itself into B.

Let me give you some numbers here, just so you can get a sense of the effect. If you had a linear demand curve where quantity is 100 minus price and there's no cost for A, then the monopoly price is 50. If the monopolist charges 50 it makes 50 times 50 or 2500. (Remember, there are no costs here.) If it lowers its price to 45, it gets 55 sales. 55 times 45 is almost the same as 50 times 50; in fact it's only \$25 less. Customers are much better off because they've saved, in this particular case, \$5 on each of their prior 50 units purchased. They've saved a huge amount (\$250) and the monopolist has hardly given up anything (\$25). The customer savings are ten times its lost profits.

Because customers saved \$5 on A they're happy to give the monopolist back a dollar on B. If they give it back a dollar on B, the monopolist makes an extra \$50. If the monopolist makes \$50 on B and it has given up only \$25 on A, then on net, it is \$25 better off. Customers are essentially \$4 better off because they've saved \$5 on A and given back \$1 on B.

The reason why the result is working is that customers buy more A from the monopolist when it cuts its price and that means the price cut doesn't cost it a dollar per dollar. If existing customers are only going to buy one unit, then using that good to give a discount costs the firm a dollar for each dollar it cuts price. But if cutting price leads customers to increase their demand, then the firm is okay. (For a formal proof, see Barry Nalebuff, *Bundling as a Way to Leverage Monopoly Power* (2004), available at www.ssrn.com.)

Monopoly is inefficient, and that explains what's going on here in terms of Bork's one monopoly profit. It's true that if you take the inefficient monopoly profit, there's only that amount to go around. But, what we've done is to expand the pie by reducing the monopoly inefficiency. In essence, the firm is saying: I don't really want to charge you the monopoly price. I'd like to charge you less but I don't have any way of making that back. I know it's inefficient to charge you that much, so, if you help me out on the B market, I'll charge you less on the A market. That's how it is that the firm is leveraging its monopoly.

The end result is that everyone is better off, at least in the short run. However, we have foreclosure because the other B firms can't compete with this. They would have to price below cost, to make up for the fact that the monopolist has given \$5 off the A market and its rivals in the B market don't have that \$5 to come up with.

Bundling Distinguished from Predatory Pricing. Now, let me give you another way of thinking about how exclusion occurs, one which shows how bundling leads to a different outcome than ordinary price competition. The first example is an extreme version. The monopoly in A facing competition in B says to its customers, "If you want to buy my A you have to buy my B."

Well, customers don't care whose B they buy. They're happy to buy the monopolist's version of B, so they do. Other firms are foreclosed. It doesn't cost the monopolist anything.

That works. The only problem is that it is pretty much a per se antitrust violation. So, the trick is the monopolist can achieve just about the same thing at no cost. Instead of saying, "you have to buy my B in order to buy my A," the monopolist says "if you don't buy my B, I'm going to charge you a boatload for my A. I will raise the price of A if you just buy it à la carte. I'll charge you the right price for A only if you also buy my B." In effect the monopolist message is, "You'll only be able to buy my A at an economic price if you also buy my B."

Because the threat works, the monopolist ultimately charges the right price for A and customers all buy its B. In the end, there's no loss to the firm and there's no loss to customers either. The big difference between this and predatory pricing is that with predatory pricing the monopolist actually has to charge below cost on B. Here, all the monopolist has to do is *threaten* to raise the price of A if a customer doesn't go along with it. If the threat works, the monopolist doesn't have to carry

it out and hence there was no cost to it. The outcome is the same with respect to foreclosure, but exclusion comes at no cost, and hence there's no issue of recoupment.

There are a couple of other ways the exclusion can be created. For example, instead of saying I'm going to lower the price of A if you buy my B, the monopolist can say I'll lower the price of B and take it back on A. Imagine that the price of B is the competitive amount c , and the monopolist offers to sell B at a price of $c-1$ while at the same time raising the price of the monopoly good A to $m+1$.

Old price of A & B: $m+c$

New price of A & B: $(m+1) + (c-1) = m+c$

At the end of the day, the total price of A and B comes up to the same amount. Everyone is going to buy the monopolist's B. Why? Because it's the cheapest B on the market. Nobody else can compete with a $c-1$ price. It's a dollar below cost. On the other hand, how does the monopolist recoup? Well, it is recouping right now. It's recouping by charging an extra dollar on A. Because customers only care about the combined price of A plus B, customers are no worse off but rivals can't match. (Here there's an assumption that A and B are complements and that all customers buy one unit of each.)

One approach is that the monopolist can lower the price of A and raise the price of B. Another approach is that the monopolist can lower the price of B and raise the price of A. It can do it either way. When it lowers the price of B and raises the price of A, it doesn't even need a contract because it's the only one customers can go to for A, and its B is the cheapest one in the market. The A monopolist is going to win both markets.

I think this is a reasonable example in terms of numbers for Netscape or for media players. If you thought of A selling at a hundred, think of that as the operating system. Good B is a media player that customers value at between \$1 and \$2, and the rival is charging a dollar for it. If the monopolist in A comes in and offers B for free, the rival can't match that. Customers were willing to pay \$100 for A and \$1 for B before; now they are getting B for free, so the monopolist can raise the price of A to \$101. In essence, the monopolist has the ability to recoup simultaneously by real-locating the prices. That's one key reason why bundling is different than a standard predatory pricing case.

You can also work it out the other way, where the monopolist in A offers to lower the price of the monopoly product under the condition that the customer buys its competitive product at a price premium. This works even in the case where the quantities are fixed (so there's no advantage in terms of getting increased demand). But, in order to do that, the monopolist has to have a contract because the deal is: "I'm going to give you a discount on A provided you buy my B." It can either threaten to raise A above its regular price or it could offer to discount it below its regular price in return for which the customer must buy its B product at the price premium.

Under that second way of doing it, the monopolist threatens: the regular price of the monopoly product is m , but, I'm going to charge $m+1$ if you only buy A by itself. From the customer's perspective, that extra dollar they're going to have to pay for A if they buy it by itself really means that somebody selling B has to undercut B by a dollar in order for them to buy B on an à la carte basis. And, of course, rivals can't afford to do that. But if the customer goes and buys the monopolist's product along with B, that extra dollar disappears. So the customer only has to pay the extra dollar if it buys A on an à la carte basis. If the customer buys A as part of a package, and if it agrees to buy all of its B from the monopolist, then it won't be charged the inefficient extra dollar price. Hence, as things play out, the monopolist maximizes its profits. It charges m . It suffers no loss

because it charges the optimal price to customers that go along with its deal. And that leads to exclusion because equally efficient rivals can't discount B enough in order to displace the threat.

Let's look at some numbers to put this in context. The monopoly price is \$50. The firm threatens to go up to \$55. Rivals can't afford to give customers that \$5 back in order to get them to buy their à la carte products.

One interesting thing about this is that normally when a firm makes a threat, it's very expensive for it to carry out the threat. Here, if the customer ends up forcing the firm to carry the threat out, it makes almost as much money (selling 45 units at \$55) as it does selling 50 units at \$50. Because \$50 was its optimal price, it hardly hurts the firm to go up to \$55. It hardly hurts the firm to go down to \$45. Customers care a lot between \$45 and \$55. In essence, the monopolist threatens its customers: I can hurt you a lot by going up to \$55 if you don't buy my B. I can reward you a lot by going down to \$45 if you do buy my B. All of these prices are about the same to me, but they matter a lot to you.

All of this leads me to what I would like to see used as the definition for exclusionary bundling. Take the price of an A-B bundle and look at what the incremental price of that A-B bundle is over A alone. See how much more you are paying to get the bundle than just A, and compare that incremental price to the cost of producing B. (And by the cost, I mean the monopolist's cost of producing B.) If that incremental price is less than the cost, then we have exclusionary bundling and an antitrust issue. If it isn't, then we have a safe harbor.

Exclusionary Bundling

Firm with market power in A also sells good B and faces competition in B.

Firm prices A-B bundle such that *incremental* price of A-B over A alone is less than long-run average variable cost of B.

Result: Equally efficient rivals selling only B are foreclosed. This is the horizontal parallel to vertical price squeeze.

The reason for this test is that if an incremental price is less than the cost, then equally efficient firms to the monopolist will be excluded—they will be foreclosed from the B market. I think this is pretty much the natural extension of the predatory pricing test to a bundle. What I'm really doing is calculating the implied price correctly and I'm calculating cost correctly. But it's not the same as a predatory pricing test because of two issues. One is that the monopolist doesn't necessarily lose money, and recoupment, therefore, is going to be a different issue. (The reason is because the monopolist was never expecting to sell A alone. If the monopolist charges too high a price for A à la carte, nobody's going to buy it. And hence, the monopolist is not sacrificing that revenue because it was a threat, not an actual market transaction price.)

The second reason why it is different from predatory pricing is that prices are difficult to calculate in the bundle. If one firm offers \$397 and another firm offers \$412, you know that \$397 is cheaper than \$412. But if the monopolist offers a complicated A-B bundle, and somebody else just has an A, you have to figure out how much A you're buying, how much B you're buying in order to really figure out the incremental prices. And, if you're uncertain about the quantities of A and B, then you can easily make mistakes. All the uncertainties about quantities make exclusionary bundling a much more complicated calculation for buyers. In the case of *LePage's*, the nature of 3M's bundle discounts made it hard to figure out what the buyers expected to pay for

3M's generic tape, which made it hard to figure out how much discount LePage's needed to offer to be competitive.

Exclusionary bundling by itself is not necessarily a violation. It doesn't say anything about the size of the market that is foreclosed. If all B customers also buy A, then the entire B market will be foreclosed and the effect will be significant. Exclusionary bundling doesn't say anything about purpose. The purpose could be something anticompetitive, such as the monopolist wants to deter rivals from using B as a platform to enter A, or that it's intending to monopolize the B market. I don't need to show recoupment here, but I do want some evidence of anticompetitive purpose. I also want the firm to have reasonably understood that it engaged in exclusionary bundling. (Exclusionary bundling could be unintentional if the seller had a very different expectation about the relative future sales of A and B.)

If you're worried about a safe harbor (because these defenses might be hard for a firm to establish), the safe harbor is simple—don't engage in exclusionary bundling. In particular, if your bundled discounts are large because your à la carte price is artificially high, you are in danger. If you want to know that you're okay, don't engage in exclusionary bundling and you'll be fine.

Let me conclude by taking you through some actual cases. In Australia, the exclusionary bundling case against Baxter Healthcare involved prices for various sterile fluids primarily used with peritoneal dialysis patients.¹ Offer 1 was on an à la carte basis and Offer 2 was on a bundled basis.

South Australia²

	Offer 1 Price	Offer 2 Price	Savings
LVP, IS, and PN Products	\$4,714,867		
PD Products	\$1,201,611		
Total	\$5,916,478	\$4,329,136	\$1,587,342

Baxter had a monopoly over the first three products (LVP, IS, and PN), but faced competition for the peritoneal dialysis (PD) products.³ If you examine the à la carte prices, what you'll see is that it was actually cheaper to buy the entire bundle (at \$4.3 million) than it was to buy the first three products (at \$4.7 million) on an à la carte basis. The implied incremental price of PD products in the bundle was a negative price \$385,731. Thus, a rival would have had to pay the State Purchasing Authority in order to sell its PD products.

A negative price is always below production cost, however it is measured. As you might imagine, it was hard for rivals to compete. Or, was Baxter just nuts? Should the pricing people be shot? No—because they never expected to sell anything at the à la carte price.

Nobody was going to pay that amount. Given that no one was going to take it, it wasn't that they were giving that up. Moreover, the à la carte prices were about 50 percent above what the previous prices were in this market.

¹ Australian Competition and Consumer Commission v. Baxter Healthcare Pty. Ltd., Federal Court Proceedings No. N1153 of 2002.

² These figures are taken from the public opening statement of Stephen Rushton, pp. 93–95 of ACCC and Baxter Healthcare Pty Ltd. & Others, Sydney, 10:00 AM, May 19, 2004.

³ LVP are large volume products, such as saline bags. IS are irrigating solutions. PN are peritoneal nutrition solutions.

Similarly, in *LePage's*, 3M said that its entire bundle was above cost. But I think that's an irrelevant argument. The issue is not whether all of its tapes (Scotch™ and "generic" transparent tape) were above cost, but whether or not the incremental price for the generic transparent tape was above the incremental cost for the generic transparent tape. And there is some question about that. 3M argues in one of its footnotes that its pricing was above cost, however costs are calculated. However, in the text it actually says it never priced its "transparent tape" below its cost. Well, does "transparent tape" include Scotch Tape™ in the definition, since Scotch Tape™ is transparent? Why doesn't 3M ever calculate the implied incremental price of its generic tape? And why are they making this argument in a footnote? To me, this is the central issue of the whole case.

LePage's never showed that the incremental price was below cost. It never tried to do that. And 3M never showed that it wasn't. And so, both of them are responsible for this controversial decision in that the central issue was not addressed.

In *SmithKline v. Lilly*,⁴ you had the same sort of thing going on in the cephalosporin market. The incremental price of Kefzol was sufficiently low that the rival SmithKline couldn't compete. (The one caveat is that the courts used average cost rather than variable cost to reach this conclusion.) Contrast this with *Ortho v. Abbott*,⁵ where the experts calculated incremental prices and discovered that the incremental price was not below cost. As a result, the courts didn't find Ortho guilty. What's good about the exclusionary bundling test is that it works both ways. If you violated the test, as in *Lilly*, you're found guilty. If you don't violate the test, as in *Ortho*, you're okay.

Bundle v. Bundle Competition. Finally, a word on bundle-versus-bundle competition. You can sell a bundle against rivals that are selling individual components. Alternatively, you can be in the bundle-versus-bundle competition situation.⁶ To compare these two cases, I've created a baseline with no bundling, just component-versus-component competition. This baseline is set so that all the prices are 1 and the two firms are splitting the market evenly. With a model of linear demand and some other simplifying assumptions, you find that a firm that can bundle (which in this case is A) wins when selling against a firm that doesn't bundle. It gains market share and its single-good rivals really have trouble.

The advantage comes from solving the coordination issue. When one of the single-good rivals lowers the price of its part of the bundle, that improves its demand. It also improves the other firm's demand and it doesn't take that into account. And so therefore, a single-good firm doesn't have proper incentive to cut price.

In contrast, if you go to bundle-versus-bundle competition what you discover is that prices fall by 50 percent in the market. That is, the bundle goes from \$2, one dollar for each component, all the way down to \$1. Bundle-versus-bundle competition drives prices down in half compared to our baseline. The reason is that if either firm cuts its price, not only does it make one more sale, it actually make two more sales. It sells A_1 and A_2 . That's why rivals have twice the incentive to cut the price. And so prices and profits have to be half as big. That extra incentive to be price competitive works to customers' advantage when all firms in the market can bundle—which I think is typically the case in the telecom world.

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—BARRY NALEBUFF

⁴ *SmithKline Corp. v. Eli Lilly & Co.*, 575 F.2d 1056 (3d Cir. 1978).

⁵ *Ortho Diagnostic Sys., Inc. v. Abbott Labs., Inc.*, 920 F. Supp. 455 (S.D.N.Y. 1996).

⁶ This argument is based on the more formal treatment found in Barry Nalebuff, *Competing Against Bundles*, in *INCENTIVES, ORGANIZATION, AND PUBLIC ECONOMICS* (Peter Hammond & Gareth Myles eds., 2000).

In conclusion, I think that the Chicago School distracted our understanding of bundling by focusing on a special case where products are consumed one or zero. While this applies to some circumstances, it is not the general case. When consumption is variable, I have shown how bundling and tying create the ability to leverage market power.

A key starting point is that you need market power to leverage, and that's often lacking in telecom. Moreover, telecom bundling creates efficiencies, which are important in terms of marketing, customer acquisition, and billing—all of which are legitimate reasons to bundle. And if the market has bundle-versus-bundle competition, the results will be very competitive.

There is no one simple story about bundling. That's all the more reason why I hope to have convinced you that there's is nothing so practical as good theory.

BOB ZASTROW: I have copies of the amicus brief in *LePage's* filed by Verizon and a number of other companies that have engaged in some form of bundled pricing.⁷ I'm here to discuss whether theories of anticompetitive bundling may be sensibly applied to the telecom industry. We all know that there are some misguided souls out there who think that local service is a monopoly, but I'm not going to get into that debate. I'm going to call local service the "A" product and I'm going to call the other things that a telecom company might want to bundle with local service the "B" product.

The first thing that struck me when I started delving into the literature this summer, is how different, even assuming the A product is a monopoly, telecom bundling is from the typical bundling precedents and economists' hypotheticals. In the typical case, as Professor Nalebuff has said, the monopolist discounts prices on product A to manipulate sales of product B. Here, the local phone service, product A, is a regulated service that is frequently sold below cost due to state regulation. So there's really no margin on A to play with. The bundle, at least in the telecom industry, works very much in reverse: we'll give you a discount on the B product, whether that's DSL or long distance, if you also keep our A product (local phone service). I haven't fully thought through whether that distinction is dispositive, but it struck me when I first started looking at it that this is very different.

Second, while we can disagree on whether you have to show predation as part of your analysis—in part of our *LePage's* brief there is an argument as to why you should—you would still have to prove monopoly maintenance or monopoly extension, which is going to be very difficult to show in the telecom industry. The B products are sold in a very competitive market. Take DSL for example. People have occasionally alleged that DSL is itself a product market, which the telephone companies are in danger of monopolizing. But the reality is that the cable industry still has the majority of broadband customers, although we're gaining on them. It is hard to tell a credible story that the Baby Bells are in danger of monopolizing the high speed data markets. Monopoly maintenance, I think, falls for a separate reason. When you look at a lot of these cases where the plaintiffs have won on a monopoly maintenance theory, product B is a partial substitute or potential replacement for product A, and A's whole strategy is to forestall B's entry into A's market. In telecom the component parts of the package tend to be complements rather than substitutes.

Another reason I think plaintiffs are going to have a hard time in this industry is that products tend to be sold in fixed quantities. In those circumstances, Professor Nalebuff agrees that the one monopoly rent story does apply. A customer normally needs one local line and one DSL service.

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—ROBERT ZASTROW

⁷ 2003 WL 22428381.

You can't even put two DSL lines on a single phone line. Long distance was different in the past. Long distance was consumed variably, for the most part, four or five years ago. That is becoming a lot less true today. In fact, those of you who read last Monday's *Wall Street Journal* article, all of the packages that they were talking about were all-you-can-use packages.

As for why bundling occurs in the communications sector, I think the answers are obvious. There are very significant efficiencies for both the cable industry and telephone companies. Both of us already have a line into the customer's residence. We already sell that person something. We bill them monthly anyway. From the customer's point of view, sending us one less check in a month is a very good idea. If you have a summer house, think of the number of utility bills you pay maintaining two houses. The convenience of one bill for several services is not just for the service provider—it's for the customer too.

In terms of where are we going politically with this, those of you who are real telecom junkies and have read the latest FCC decisions know that the FCC has adopted a fairly unique set of rules in the high-speed data industry, to encourage bundling. In its recent line-sharing decision, the FCC has eliminated, prospectively, some of those obligations to share a line with competitors. In other words, where we provide the voice service, we used to be required to let someone else provide the DSL service. They have, however, left intact the obligations to configure our network to permit others share the line together so that a CLEC and AT&T could partner to provide voice and data services. The underlying rationale is that a more lenient policy will encourage competitors to produce their own services.

The other thing I think you see is a lot of bundle-versus-bundle competition emerging in this industry. That was the subject of the *Wall Street Journal* article last Monday. It's forcing competition into new areas. The fact that Time Warner Cable has a video offering and Verizon has only a resale offering with DirecTV is forcing us to spend billions of dollars to provide an equivalent video offering on our own network. Many of you have heard the public announcement that Verizon is actually building fiber to the home, and will get to about a million homes within the first year or so. Similarly, Time Warner's prior lack of a voice offering is forcing it and others to implement VOIP and cable telephony.

We could use more empirical research on the actual benefits of bundling to consumers. I know, anecdotally, that I pay less for the package than we used to pay our long distance provider alone for long distance service. We pay \$12 less in our house for video and so I think there is at least an anecdotal story that bundle-versus-bundle competition is very good for consumers. And, lest you think that this area is becoming a two-firm monopoly, read the analysts' articles about wireless, and about where wireless is going with data. For example, take the O'Hare Red Carpet Club, where I was recently in a four hour meeting. There used to be hundreds of phone and data lines so people could plug in their computers, but now everyone is using wireless devices to check their messages. It's a new world out there and I think a relatively lenient regulatory position will in the end be very good for consumers, at least in this industry.

MARK DEL BIANCO: I have to say that there's been less disagreement among our first two speakers than I'd anticipated. Lets hope our next speaker, Marc Lawrence-Apfelbaum, will have something a little more provocative to say.

MARC LAWRENCE-APFELBAUM: First, I just wanted to be clear that I'm not bundling today. I'm speaking only for myself and not also for my company, as the government lawyers like to say. In terms of the *LePage's* case, I really don't think it's a very controversial decision. It's not very well rea-

soned and it's hard to tell exactly what the facts were and what the practices were. But, I think it's clear that defendant 3M was arguing that bundling can never be an antitrust violation unless it involves pricing below cost. And to me the decision pretty much said: well no, there can be antitrust violations by a monopolist for other things besides pricing below cost, which I think is certainly true. It's true going back to John D. Rockefeller buying up all of the wooden barrels so that none of his rivals would have any place to put their oil. There are plenty of cases and learned treatises on antitrust law about monopolists doing things that are exclusionary other than pricing below cost. In *LePage's*, as I said, I think it's a little hard to follow exactly what was going on, but it does seem that there was some exclusive dealing in addition to bundling.

For our discussion today, it is important to note that the bundling in *LePage's* was something quite different from what goes on in the communications world. It wasn't just, if you buy these two products from me at the same time, I'll give you a discount. Instead, it applied to purchases from 3M that were spaced out over the course of a year, and if the buyer didn't buy from the plaintiff, it would get a lot better discount than if it bought anything at all from the plaintiff. It seems to me that what 3M's conduct was designed to say was: don't buy anything at all from my rival. To me that is more exclusionary than just somebody who says if you buy A and B from me I'll give you a discount, especially at the retail level. If so, it would be similar to the Netscape case with Microsoft, where the defendant saw a new phenomenon as something that could threaten its monopoly status in the long-term. There was testimony from executives at 3M that they saw private label tape as a threat to their branded tape, and although they weren't interested in being in the private label business, they were very interested in making sure that private label tape didn't catch on.

On the communications side, currently it's very hard to say of anything cable operators sell, that there's market power associated with the cable operator. If you look at the core video business, the largest multichannel seller is Comcast. The second largest is DirecTV (satellite). Time Warner Cable is the third largest, and then DishTV is a very close number four. When you look in terms of where new customers are going, I think that DBS is getting most of the new customers. So, I think in these circumstances it's very hard to say that there's any market power on behalf of the cable operators—and it's even more true when you look at everything else that we are selling. High speed data is certainly very, very competitive. And on the phone side, we are the brand new entrant. It's just inconceivable that someone could say that cable operators have market power. I think the only explanation for why cable operators are bundling is to respond to competitors who are offering bundles. There are efficiencies in bundling. I think it's the very definition of positive competition to be offering bundles in the market circumstances that characterize our business. And, that's pretty much all I have, so I guess we're up to the questions.

The only explanation for why cable operators are bundling is to respond to competitors who are offering bundles. There are efficiencies in bundling.

—MARC LAWRENCE-
APFELBAUM

Questions and Answers

QUESTIONER: I want to bring this back to communications markets. Right now as a consumer, I seem to have two bundles to choose from at home. I have a bundle of long distance and local service and they're trying to get me to buy broadband service. And then I have a bundle of cable service where they're trying to get me to buy their broadband service. But, I really don't have two equal bundles to choose from—to play off each other—and get the best price. And I was wondering from a policy perspective, is there anything that regulators ought to be doing to try to encourage consolidation in such a way that as a consumer, I have two more equal bundles to choose from and to play off each other?

MARK DEL BIANCO: What I'd like to do is have the business guys answer that first and then have the academic answer the strategic reasons why, if you were a competitor, you may not want to have bundles that overlap and are coherent enough for the consumer to figure out which one is in fact the better deal.

MARC LAWRENCE-APFELBAUM: Well, I think it's fair to say that bundles are becoming more similar. But, I think even if they weren't, I don't see that there's any strong government action saying you need to consolidate more to have more similar bundles. If the market place is working and there is lots of competition between different providers and some have two products and some have three, I think consumers can still do the math and figure out for themselves what's the best way to go without setting up some government-mandated further consolidation or other regulation.

BOB ZASTROW: I may not have been making myself totally clear, but I think that is what the government was doing in a series of decisions on line sharing and line splitting. It was very explicitly imposing obligations on us to make it possible for others to come in and offer bundled voice and data services on our network. I would just argue that given the history of telecom regulation, more harm than good can result. If you look at the past ten years, I'd say, the dual mistakes of not allowing spectrum to be traded, when combined with network sharing rules that drew investment capital away from the wireless business and into the hands of people who resold our networks, have done a lot of harm. And so, if the government wants to get active again, just think of whether you can adequately predict the consequences of what you are doing.

BARRY NALEBUFF: I think what you pointed out is that it's not just A and B, it's ABC. Let's assume for a moment, the local phone service (A) is a monopoly and that cable (C) is a monopoly. Let B be DSL/broadband service. In some sense, then, you have an AB bundle competing against a BC bundle. And so you have some parts that are overlapping and some not. Alas, the theory is not well enough developed to truly answer your question. The good news is that the world seems to be heading towards an ABC against ABC, which I'd bet is going to be good for consumers.

QUESTIONER: If you have an ABC vs. ABC bundle, would you expect prices to be closer to cost than an A vs. A?

BARRY NALEBUFF: One of the things that's true is the more items you have in a bundle, in a bundle-to-bundle competition, the lower prices are. The simple intuition for this is that when you cut the price of one component, in essence, you are getting increased A, B, and C sales, because when the person buys more A, they're getting the B and the C too. Therefore, there's more at stake, and because there's more at stake, you're willing to be more aggressive. That suggests why you may get a much more competitive market with bundle vs. bundle competition.

The theory is pretty unambiguous. The larger the bundle, assuming the bundles are comparable, the more competitive it becomes. So AB vs. AB is more competitive than A vs. A. And ABC vs. ABC is more competitive than AB vs. AB.

QUESTIONER: Just to follow up on the evolution of "ABC vs. ABC," I'd like to tag on to both Bob and Marc having mentioned the race on the video component of the bundle. What happens if you have perfect ABC bundle vs. ABC bundle offerings, but one of the participants in that competition has a key element that can also be offered outside of the ABC bundle? To make the explicit example:

if you have a Time Warner movie offering that can be offered theatrically by DVD, broadcast television, paid TV, those kinds of things where there's a licensing scheme, even if the owner of the intellectual property in the movie offers that particular license to the competitors in the ABC bundles at the same price, doesn't the ability to offer it outside the bundle through different competitive channels alter the competitive posture vis-à-vis the bundles? In other words, whoever is offering C outside of the ABC channel can choose to increase their margins outside of the channel such that the C component becomes the least profitable of the three, or the most profitable depending upon whether the margins appear to be favored as part of an ABC bundle or whether the margins are favored by keeping the higher revenues of product C outside of the ABC bundle.

MARC LAWRENCE-APFELBAUM: I'm not sure I'm following you. I think other sellers out there are free to sell or not sell products from other parts of Time Warner as they wish. Getting back to first principles, I think we face competition in each and every one of the products we sell and if we're going to put something else in the bundle or not put it in it's really responding to what we think customers want. I don't think that we can game the system whether or not Warner Brothers chooses to do anything in particular with its movies.

BARRY NALEBUFF: I think that you are correct in saying that there is some content that is a monopoly product. In that sense, it's not a straight ABC versus ABC competition. If one player has all the movies, then it can engage in either a horizontal or vertical price squeeze as part of that. In that sense, whether or not other people are selling the C or not selling it, it's not as if they are producing it. The question is: what are the prices, and is exclusionary bundling taking place where we have monopoly?

In fact, one of the ironies is that there's been a lot of talk about consumers trying to get cable operators to debundle content. Actually, the cable operators themselves are being sold bundled content. Which is why, if you want Disney, you have to buy ESPN. It seems to me that's another place where we have some potential issues associated with bundling. ●