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Francine Lafontaine, *University of Michigan, Ross School
of Business*

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Vertical Restraints Fundamentals for MBAs

Francine Lafontaine

Abstract

This lecture on vertical restraint is a transcript of a second-year MBA class at the Stephen M. Ross School of Business, University of Michigan. At various points, student comments and comments by Valerie Suslow, the co-teacher of this course, appear. Accompanying this lecture are the PowerPoint slides and a few film clips from the lecture.

The lecture begins with a discussion of vertical boundaries of the firm, and reasons why firms might want to vertically integrate. The bulk of the lecture, however, focuses on vertical restraints. After defining the different types of restraints found in manufacturer retailer contracts, the lecture covers the potential reasons – both efficiency and anti-competitive arguments – why these restraints are used. Finally, the lecture provides a short discussion of public policy towards these restraints, including their treatment under antitrust and various conflicting industry laws. This last section also contains a few examples of recent cases.

KEYWORDS: vertical, restraints, antitrust

Author Notes: This lecture draws heavily from Blair and Lafontaine (2005), Carlton and Perloff (2000), Lafontaine and Slade (2006), and the references therein.

Slide #1

Welcome everyone! Please take your seat and settle in so we can get started.

This lecture is about vertical restraints. For those of you who have an interest in marketing, for example, vertical restraints arise in the context of channels of distributions. In operations, vertical restraints are part of supply chain issues. So in the different fields in business, people don't use necessarily the same nomenclature. "Vertical restraints" is the nomenclature used in economics and antitrust.

Slide #2

Let me start by describing the topics that I want to cover in the next hour and a half. I will talk first briefly about vertical boundaries of the firm. What you've seen in Professor Suslow's lectures has had to do with mergers within an industry. Such mergers affect the horizontal boundaries of the firm. The vertical boundaries, in contrast, are defined by whether a firm integrates its suppliers, and/or its service providers/distributors down the vertical chain as well. I will talk about the issues that affect these decisions, and then about why firms impose restraints when they don't vertically integrate. I will then discuss public policy related to these issues, which means mostly, but not only, antitrust policy. Finally, I will mention a few recent cases and decisions, and talk about what they mean in terms of how you manage vertical relationships.

Slide #3

Vertical integration means that a firm is involved in many different stages of production. For example, major oil companies are very highly vertically integrated. Many of them are involved in exploration, extraction, refining, and all the way to distribution and gasoline stations. Large oil companies are active throughout this whole spectrum of activities. But most firms in reality are much more focused on a narrower set of activities, and they have suppliers and distributors that are separate from them. Firms must make decisions about this: they have to decide whether to use internal production, which is to vertically integrate, or use the market, in which case they just buy distribution services from retailers and wholesalers, and buy supplies from other firms as well.

Slide #4

The most important factor in making these decisions is: all else the same, what is the total cost of organizing an activity one way or the other? Assuming the benefits are the same, you want to vertically integrate whenever the costs of doing things internally are smaller than the costs of going through the market, and vice

versa otherwise. But costs here include all opportunity costs! In other words, you need to think about what is the cost of using your resources and your time in, say, the distribution side of your business versus other activities.

Slide #5

Let me be a bit more specific. One consideration that will affect your decision is whether you need timely supplies of a particular input. If you do, and rationing can occur, you might want to integrate backward to guarantee your access to this input. In other words, there is a cost to not getting the supplies you need, and that cost should be included in your assessment of alternative procurement modes. Access to supply is part of the rationale, for example, that oil companies give for having very high degrees of vertical integration: they want to ensure supply throughout their system, all the way to retailers. And indeed gasoline retailers get worried about not getting access to oil if they are not “connected” to an oil company in certain circumstances, for example when oil becomes a scarce resource (as in during the oil crisis in the 70’s).

Student Question: But shouldn’t a retailer worry that the company’s wells will run dry? Wouldn’t it be better off to have many different sources of supply so that if one no longer has enough oil, the other sources will compensate?

There is some safety in sourcing from multiple suppliers. But the issue here is incentives. In terms of safety and the worry of wells running dry, the oil company will typically have a pool of wells. And their wells will be spread out geographically. They will diversify in all those ways.

As for gasoline retailers, there are a number of gasoline stations that are actually owned by the refineries or oil companies, while others are owned by lessee dealers, which means a station owner with an exclusive contract with an oil company. Finally, a number of stations are owned by independents. As you move towards independence, at times when the oil company has less oil for whatever reason, it might choose to first supply its own stations, and then if it still has gasoline on hand, it supplies the lessee dealers, and only if it has more oil yet will it go all the way to the independents. The retailers tend to worry about this. They want to develop a relationship with an oil company that is going to be committed to getting supplies to them. And in some cases this leads to vertical integration or contracts.

Slide #6

Another important consideration is the presence of externalities. Externalities are things that are just not priced in the market. Whether they are good or bad, the problem is that they are not priced. In automotive retailing, for example, and in

fact in all franchising, the experience that you have as a consumer in one store in a chain can affect how you think about that chain as a whole. If your experience, when you try to get your car fixed at your local car dealer, is really horrific, you will get out with a pretty negative reaction that you will connect not only to that car dealer, but potentially to the car brand, the dealer network, and so on. These externalities are things that manufacturers have to worry about. What they will do sometimes to address this is to vertically integrate. In the case of car dealerships, they don't in part because it's illegal for car manufacturers to own dealerships in the US. So this is kind of a separate case that I will come back to later. But in other industries, what firms might do is vertically integrate to internalize the externalities. McDonalds, for example, owns and operates directly one out of every four restaurants in the chain, and arguably they do this to control externalities issues. The same thing comes up for car rental companies. One of the externality problems that they worry about is that customers often want to rent a car in one location and return it at another location. If the outlets are franchised, there has to be some kind of mechanism to make franchisees share the revenues or they won't play along "well" with an open return policy. Alternatively, the chain can vertically integrate: after all, if the two outlets are part of the same ownership structure, then there's no conflict, no need to arrange any payment between the locations.

My point with all this is just that externalities will lead manufacturers to vertically integrate sometimes, and if they don't integrate they will often want to impose some kinds of restraints on what the separate independent retailer or franchisee can do.

Slide #7

Another potential reason for vertical integration is something called double markups, or double margins. Suppose that you are a manufacturer, and you've decided that the demand for your product looks like this (see slide). This is a branded, differentiated product, which explains why you have a downward-sloping demand curve, why you have some market power. I am reproducing the demand curve here -- on the right hand side -- just for comparison for a minute from now. Suppose for simplicity that you have a flat marginal cost of production (see slide). Then, as a manufacturer, what you want to do is equate your marginal revenue and marginal cost to determine the quantity you should sell on the market. At that quantity, you look back to the demand curve to find the price that you can sell your product at. All this is fine -- it is our standard monopoly solution. So let me reproduce it now on the right-hand side. Now call the graph on the left-hand side the manufacturer's picture, and call the right-hand side the retailer's picture. Suppose the manufacturer says okay, P_W is the price that I want so I will sell my product at this price. What does the retailer do? Well, he says

my cost per unit ($= mc$) is the wholesale price that the manufacturer sets, which is P_W . Note that for simplicity, I am not attaching any cost to retailing activities per se – it is easy to add these in and get the same results, but the graph is messier... Well, at that cost of mc , what do I want to do as a retailer? If P_W is my marginal cost, then I want to equate that with my marginal revenue. When I do that, the price that I want to charge is P_R . That is the double or rather second margin coming in. The manufacturer has put in a margin by setting $P_W > MC$, and the retailer now puts in the second margin by setting $P_R > mc = P_W$. And from the manufacturer's perspective, the price is ending up being too high ($P_R > P_W$) and the quantity too small ($Q_R < Q_M$). The reason that the retailer is charging this higher price is that at this price, his profit is $(P_R - P_W)$ times Q_R . If instead he was to charge P_W to customers, he would sell the quantity that the manufacturer wants, but would make zero profit. There is no reason the retailer would want to do that. To maximize his profit he is better off with this P_R and Q_R . The manufacturer, on the other hand, is worse off at this new higher price than she would be at (Q_W , P_W) so she will want to try and prevent the retailer from going to P_R .

One thing she can do is to vertically integrate. If the manufacturer owns the retailer, then the retailer won't add this extra margin because we're back to just the left-hand side of the picture. The right-hand side has disappeared. But if the manufacturer does not vertically integrate, she's going to want to use some form of vertical restraint. In this case, it could be a price restraint: sell the product at P_W , and then impose a constraint that the retailer cannot sell above P_W . (Remember that the manufacturer can do this in this example because of the unrealistic assumption of no retail costs. To make this more realistic, I could assume the cost of retailing this product is $\$r/\text{unit}$, and then the manufacturer would require that the retailer sets price at $P_W + r$. This is more realistic but forces us to keep track of more stuff, and it does not change the basic idea, so I now go back to the case where $\$r=0$.) At P_W , the retailer would sell Q_W and get zero profit, or normal returns. He would agree to this because he is getting normal returns on investment and so on (covering all his costs, including opportunity costs, which we assumed to be zero for simplicity). But the price set by the retailer would have to be constrained in order to get that outcome. And, unfortunately, restricting the prices that retailers set typically is not legal – Steve's Ice Cream, for example, was sued a number of years ago because they tried to lower the prices that a particular franchisee was charging. So price restraints are one potential way to solve the double margins problem, but some forms of these are problematic under antitrust laws... I will get back to this later.

Another way to solve the problem is to impose a minimum quantity. This is called quantity forcing and car manufacturers and oil companies are known to sometimes do that.

The bottom line, though, is that eliminating double margins is one reason why firms might vertically integrate or impose restraints. But I should be clear: my example and discussion was about a double margin, yet one could have triple margins or even more. For example, put a wholesaler in between the manufacturer and retailer in my example, and you may get these margins imposed at each level. Beer and wine distribution in Michigan functions under something called the three-tier system, by law. That law prevents any beer or wine producer from integrating with wholesalers and/or retailers, forcing the existence of these three separate levels in the industry.

Student Question: It seems that vertical integration is often an easy way to solve this problem. Why then don't we see more vertical integration between manufacturers and retailers?

For one thing, notice that embedded in the way I drew things, I assumed that this retailer has some market power. If at the manufacturer's level things look like this (left-hand side of the graph), that is, you are Quaker and you sell oats and you are the only Quaker oats seller, then (the left-hand side) picture is what we have at the manufacturer's level. But suppose that, at the retailer level, there are very many supermarkets say, all of which (can) carry Quaker oats, and they all compete intensely with one another. Then fundamentally the demand curve that each individual retailer faces is much more elastic than that (pointing to demand drawn on the right-hand side). And if it gets elastic enough, the manufacturers won't really need to worry anymore about the retailers imposing an additional margin beyond what is needed for their normal returns or profits. In other words, competition downstream solves this problem of double margins. So when considering whether or not to vertically integrate downstream, when it comes to successive markups, the first thing the manufacturer should consider is whether or not the downstream industry is competitive – if yes, then there is no problem there.

Having said that, in most retailing contexts, retailers have at least some market power, if only because they are better located (relative to particular customers) than others. For example, some supermarket is closer to your home and you might shop there in part because of that. In some cases there's even more market power because the manufacturers choose to grant exclusive territories to their retailers and give them a local area that nobody else is competing in. I will talk about that later given that is another type of vertical restraint that manufacturers use. When manufacturers do that, the retailer has even more market power.

So one of the answers then - as to why manufacturers do not all integrate retailers - is because in lots of markets, competition partially solves the double-

margin problem. But here is another part of the answer: suppose that you are Quaker Oats, and that your retailers have some market power. The question then is: is it feasible for you to vertically integrate the whole supermarket industry, and to vertically integrate all of Wal-Mart, and all the other retailers that carry your product? In this case, of course, the answer is no – vertical integration just becomes infeasible. In other words, whether vertical integration is a solution or not depends on the kind of product that we are talking about. Car manufacturers could vertically integrate with their car dealers if they wanted to – or rather if they were allowed by law. But in other industries, it's really not possible because you are just one of a very large set of products that are distributed by these distributors and retailers. And if Quaker Oats chose to own all of the supermarkets and other retailers that carry its products, then by definition it would mean that Proctor and Gamble could not. And Proctor and Gamble now would face the “lack of vertical integration” problem. It is simply not feasible for all these manufacturers of consumer goods to each own their whole retail sector.

Student Question: It seems to me that from a social welfare perspective, if monopoly is bad, then successive monopoly is really bad. Why would the government prevent firms from vertically integrating given this? Or prevent them from setting prices downstream, and yet allow them to give territories?

Your question covers a lot of ground. I am going to get to some of this in what's coming and then, if you feel I have not answered you fully by the time we get through the public policy stuff, please ask again.

I should have mentioned at the beginning that there is a lot of material in these slides. I am not sure that I am completely going to get through them. For that reason, what I have done is put a few examples of recent legal cases at the complete end. I am hoping to make it through at least the materials on public policy and answer your question (pointing to student) in particular at that time. If we don't make it to the final set of slides, however, you will have those to look at later on if you are interested in more examples.

Slide #8

Another reason for vertical integration has to do with regulations: avoiding price controls at one level of the vertical chain or another, taxes, tariffs, and so on. For example, you can shift profit from a high-tax jurisdiction to a low-tax one by changing what you own where, and by changing where you realize your profits through your transfer prices. This motive is pretty straightforward, and it tends to be pretty specific to particular industries etc., so I will not come back to it much today.

Slide #9

One last motive that I will mention is price discrimination. If you remember from your core microeconomics course, market segmentation, and being able to set prices optimally in each different market, is an important way that firms can increase their revenues and profits. The problem firms can face in implementing market segmentation strategies, however, is arbitrage. If you were to sell your product to different customers, and they can sell it among themselves, then you will not be able to price discriminate. Suppose DuPont, for example, sold titanium dioxide as an input to two industries, the paint and the paper industries, and that in the paper industry, the demand for titanium dioxide was very inelastic, while the demand for the same product from DuPont's paint industry customers was very elastic. Which set of customers should they charge a higher price to?

Student answer: paper manufacturers

Right! The optimal price is higher in the market where demand is more inelastic. The problem though is that if they sell at a low price to the paint manufacturers, these customers can just turn around and resell to the paper mills, and basically make it impossible for DuPont to price discriminate. In that situation, one thing DuPont could do -- to reestablish its capacity to price discriminate -- is to vertically integrate with one of these two markets. Either one will do! The result will be that they will have just one price for titanium dioxide on the market -- no more need for two distinct prices since this input is transferred internally now in one of the two customer segments (i.e. the paper manufacturers are now part of DuPont if that is the industry it has chosen to integrate).

If they vertically integrate with the paint industry, however, the added bonus is that the market price for titanium dioxide on the market will be the high price they want to charge paper customers. If instead they integrated with paper, titanium dioxide would be sold to paint manufacturers only, and so the price on the market would be low. If entry into the paper industry is a possibility, DuPont's new paper subsidiary now might face competition from new paper producers that can procure the titanium dioxide at a low price from the paint industry and produce paper at a low cost as a result. So in reality DuPont is better off integrating with paint, or the market whose demand is more elastic - there won't be any undercutting for their new paint division if they leave the paper customers separate and thus make the price on the market high.

Student question: But it can be very costly to vertically integrate a whole industry?

Yes, it can be, and that is an issue. How costly it is will depend on how profitable that industry is, and how you might face things like, when you start integrating with part of the industry, the firms you haven't bought yet start to see the writing on the wall, and start asking for more money as they know they are the few remaining ones and they know you really want to buy them. But your question also leads to the main point on the next slide...

Slide #10

Vertically integrating a whole industry is a very draconian response to many of the issues we have discussed so far. For example, I said earlier in response to your question (pointing to student) that Quaker Oats and other manufacturers of consumer goods simply can't just buy off the whole supermarket industry. It's also true that for DuPont to vertically integrate the whole paper industry seems like a pretty costly way to achieve price discrimination, if for no other reason than it is not clear how good DuPont would be at managing paper mills.

Student question: Do fixed costs enter into this decision?

Perhaps indirectly, through cost of capital issues. I don't know, for example, between the paint and the paper industry, which one has higher fixed or facilities costs. But from a pure price discrimination perspective, what you want to prevent is that new entrants in the industry that you vertically integrated might undercut the price that you are trying to charge for your new output simply because they can actually get one of their inputs, which is your own product, at a low price. For that purpose, you integrate simply the low-elasticity of demand market!

Again, vertically integrating to solve these issues is a very complicated and likely costly thing to do. Back to your notion of fixed costs – you are thinking about this in part because it costs a lot to “purchase” whole industries. Instead, it makes a lot of sense to think about contracting, to have some kind of long-term exclusive supply agreement, or some kind of sub-contracting agreement, a joint venture or other things like that. What I will do in the remainder of this lecture is to talk about the kinds of arrangements you might use. I'll talk mostly about manufacturer/retailer contracts and see what they put in those contracts and why they might want these. As you will see, the reasons will be very related to much of what we just discussed for vertical integration.

Prof. Valerie Suslow: I just wanted to add something. Most of you are probably more familiar with horizontal mergers. But if you think about how many of those are failures, and how many of them fall apart. You might not be as used to thinking about vertical integration or vertical mergers. But if horizontal mergers are fragile, or often don't work out, vertical mergers are

surely worse - different hidden problems come up, and so it is difficult to just say “We’ll just vertically integrate to solve this or that problem.”

Yes, and one of those hidden problems is ... well, let’s put it this way: oil companies have managed to be good at exploration, drilling, refining and retailing. Not a lot of companies are good at doing all the different kinds of things that need to be done throughout the vertical chain to make everything efficient. And so we don’t see many other industries that are as heavily vertically integrated as that.

Student Question: It seems like the conflicts within the integrated firm are likely to be even larger with vertical than with horizontal mergers?

You are right, the differences in activities are very significant here, and the conflict among the different parts of the vertical chain can be very intense as well.

Slide #11

Now, as I said, I will focus on manufacturer/retailer relations. Specifically cases where manufacturers are imposing restraints on their resellers. There was a series of articles recently, however, about Toys “R” Us. In this case it’s a retailer that imposed restraints on suppliers, and I wanted you to be aware of the fact that, while I am focusing on restraints imposed by upstream firms on downstream firms, this also occurs in the other direction. Not as frequently, but they do. Toys “R” Us is an example of just that – this retailer went to manufacturers and told them not to sell their products to competing retailers. That is an example of a downstream firm imposing restraints on upstream firms (or trying to).

Another practice that can be seen as a vertical restraint imposed by retailers is what is commonly known as a slotting allowance, where the retailer asks the manufacturer to pay a fee for putting the product on the shelf. You can think of these as a form of two-part tariff.

Slide #12

Now back to restraints imposed by manufacturers. So a manufacturer has decided to deal with independent retailers, and we want to think about how the manufacturer might want to constrain the retailers’ behavior, and why. As we’ll see, the reason manufacturers impose restraints is that if they leave the retailers to their own devices, their incentives are not necessarily to provide the level of service that the manufacturer might want, or, as I mentioned earlier under double margins, to sell things at the prices that the manufacturer might want.

Slide #13

To counter these misaligned incentives, the manufacturer directly imposes constraints via contract on what the reseller or retailer can do. One good way of thinking through the issues is to think as a manufacturer, and say: What would I choose in terms of prices or service if I could vertically integrate? And, how can I try to get close to that with a contract instead of vertical integration? That's what the restraints often do: they are contract terms by which manufacturers (or other parties in the vertical chain) try to obtain the same outcomes – be as well off - as they could get if they vertically integrated.

Slide #14

When discussing vertical restraints, we typically separate price and non-price restraints because public policy treats them differently. When a manufacturer tells its retailers what prices to charge to their customers, that is a vertical price restraint. We also refer to this as resale price maintenance. It can be a minimum, or a maximum, or a specific price that is stipulated in the contract. In terms of public policy, I'll talk more about this in a minute, but in 1997, there was a U.S. Supreme Court decision that made it for all intents and purposes legal to set a maximum price. Specifically, this decision moved maximum resale price maintenance from a *per se* to a rule of reason offense. So you can now set maximum resale prices. Somebody might complain about your doing this, but the courts will compare costs and benefit to society, and since maximum prices keep prices low for consumers, they will almost surely be allowed. Before this decision, maximum resale price maintenance, like minimum and direct price constraints, was a *per se* offense, which means if you do it, you are guilty, end of story. Minimum and specified prices are still *per se* illegal. As I said, I will get back to the public policy treatment of all these later. But the difference in policy is why I am separating the three types of resale price maintenance – they're not all equal.

As for non-price restraints, I have mentioned exclusive territories a little bit earlier. The manufacturer just tells a retailer that they are the exclusive reseller of this brand in a given town or defined area – e.g. Bryant furnaces are only sold by one distributor in Ann Arbor.

Exclusive dealing is another form of non-price restraint – that's when a manufacturer requires the retailer to only sell their product. Branded gasoline stations operate under exclusive dealing agreements. A new twist on this is the case that Professor Suslow mentioned at our last meeting. This was a case of rebates that were being offered in exchange for high loyalty, which meant that retailers got the rebates if they "chose" not to put Coke's competitor's products on the shelf. Coke is paying \$16 million in fines for having done this and related things in Italy. It has also settled a case with the European Commission on the

same issues. So the restraint doesn't have to take the form of an absolute exclusive deal - offering rebates for not selling other things was treated as an exclusive dealing arrangement as well.

Tying is another type of non-price vertical restraint. Much of the Justice Department's case against Microsoft had to do with tying. Tying is when a manufacturer requires its customers to purchase something else, beside the product that the customer really wants to purchase, to get what they really wanted to purchase. The earlier Microsoft case was about how Microsoft was bundling or tying its operating system with extra copies of the same. Specifically, Microsoft was charging OEMs the same price for the operating system whether they put it in just one or all of the computers that the OEM was manufacturing. One way to think about this requirement is that to get the operating system for one computer, the OEM had to pay for X copies, or purchase X copies, where X is how many computers it made. This was considered a form of tying. The more recent Microsoft case in the U.S. was about how Microsoft was embedding Internet Explorer within the operating system so you couldn't buy the operating system without also purchasing the browser. Again, the Justice Department argued this was tying. Finally, another example came up in the 3M case that Professor Suslow mentioned in her lectures. Here, 3M was offering rebates for combined purchases of its Scotch tape - and it has a huge share of that market - and other types of tapes. That included generic tapes, where LePage had been gaining market share. With the bundled rebates, retailers had incentives to buy not only the branded tape from 3M, but also the generics as they got larger rebates if they did that. These bundled rebates can be viewed as a form of tying in that customers (here tape retailers) end up purchasing products they might not have purchased otherwise. And indeed this case was treated as a tying case by the courts. Finally, a related practice is something called full-line forcing, where a manufacturer insists that to obtain one of their products or one model, the reseller has to purchase the whole product line.

A last type of non-price vertical restraint that I mentioned already earlier is quantity forcing, where a manufacturer tells the reseller that they need to buy a certain quantity and, therefore, they have to sell that many as well.

Slide #15

There are two broad categories of arguments as to why manufacturers would want to use the vertical restraints I just described when dealing with their retailers: efficiency and anti-competitive arguments. As a manufacturer going to court for having done this, you want to have efficiency reasons for using the restraints. They are the good reasons to do this, and I will discuss them first. Then we will discuss anti-competitive reasons for vertical restraints, and those are the ones that antitrust or competition policy enforcement agencies will be worried about. In

between these two sets of arguments you will see one slide where I have a price discrimination story. As you may remember from when we did price discrimination in your core microeconomics course, price discrimination is something that can be good or bad for consumers. If quantity goes up as a result of the price discrimination, then it is generally good for consumers, whereas if quantities are reduced as a result of price discrimination, then most likely it is bad for consumers. Since we cannot tell a priori, it is not something we want to prevent automatically.

The first efficiency argument I want to discuss is, again, double markups. Those are bad for consumers, and so as a manufacturer you make consumers better off by imposing vertical restraints to prevent these. Of course dealing with these double markups also makes you, as a manufacturer, better off. Imposing maximum resale prices, where you set the retail price at P_W , will do the job, as would quantity forcing, where you tell the retailer that they have to buy Q_W . You could also deal with this situation by trying to generate more competition among your retailers as we discussed earlier in response to your question (pointing to student). The standard textbook solution that I put in the notes, and this is one that you might remember, also, from your core microeconomics course, is to use a two-part tariff: The manufacturer sells the product at marginal cost. This marginal cost then becomes the marginal cost of the retailer, and equating it to their marginal revenue, they will buy exactly Q_W and sell it at exactly P_W . In other words, instead of the retailer putting in a second margin as we had before, since they are getting the product at marginal cost from the manufacturer, they just impose the exact margin that the manufacturer would have put in had she made that decision. In the graph, we are back to just the one panel, the one on the right, but with a new $P_W = MC$. Then the retailers will be earning this amount of profit (showing $(P_W - MC) \cdot Q_W$) in the new graph drawn on the board).

Student Question: But why would the manufacturer do this – they would make no profit!

You are right... the manufacturer so far gets zero profit. The next thing the manufacturer would need to do is to say to the retailer: for the right to be my retailer – my exclusive retailer in this market - you have to pay me this amount (showing $(P_W - MC) \cdot Q_W$) again on the graph). Suppose that the profits are \$10,000 per month, then the manufacturer will request that the retailer send him a check for \$10,000 each month for the right to be the only retailer of this product in this market. With that fee, the retailer is back to zero economic profit, and the manufacturer is getting as much profit as under vertical integration.

Two-part tariffs in general, and “optimal” two-part tariffs in particular, are not used that much though in reality. Manufacturers simply don’t often have the opportunity to charge retailers for the right to carry their products. This is done more often, however, in franchising. Instead of having royalties based on sales, a few franchisors will tell their franchisees to send a monthly check of say \$2,000 or something like that. But contracts with only fixed payments like these are pretty rare. Usually there are royalties on sales and that means that a form of double marginalization comes back in – the combination of franchise fee and royalties makes for a two-part tariff, but not an “optimal” one. The latter would involve a zero royalty as in the fixed fee only contracts just described, because the marginal cost of the “brand” really is zero.

Student Question: But if the manufacturer charges a fixed fee of \$10,000 as in your example, then the retailer gets nothing? Why would they agree to that?

Yes, if the manufacturer requests exactly \$10,000, the retailer earns zero profits. To break the equivalence, maybe the manufacturer will ask for \$9,999 in which case the retailer is making \$1 - plus normal returns. Don’t forget – in economics, profits are defined as above normal returns.

So if you can argue that you are eliminating double margins, you should be able to justify using the restraint that you’re using. That’s in part what the 1997 Supreme Court decision that I mentioned earlier, in gasoline retailing, said. You are reducing the price to consumers by having resale price maintenance – and that’s good. That is why the Supreme Court has chosen to transfer maximum resale prices to the rule of reason, to make it easier for manufacturers to justify maximum prices.

Slide #16

Here is another efficiency argument for vertical restraints: dealer free riding. Dealers can free ride on service provision, on manufacturers’ promotion activities, on investment, on inventory management, and so on. All these fall under the externalities argument that I mentioned earlier. Free riding is fundamentally imposing an externality on others. For example, you have a manufacturer “A” that went ahead and made promotional investments for a particular product. They advertised it all over the place, in newspapers and on T.V., and so a lot of people now want to buy this product. But when consumers go to the store, the retailer says “Yes, that product is great, but look at this other one. It is much better. It does this and that in addition to what the other product does.” The retailer might do this if he is getting a better margin on that alternative product compared to the one that manufacturer “A” advertised, or if its price is lower, which makes for an

easier sale. Well, this is an example of free riding. To prevent it, what manufacturer A would like to do is impose exclusive dealing. If the retailer only carries Sony televisions, then by definition it will not be able to switch customers to a Toshiba say.

Slide #17

This slide discusses another version of the dealer free-riding problem: in franchised chains, franchisees may want to use cheaper inputs than the ones the franchisor wants them to use.

In fact, I had a franchisor lawyer call me the other day to see if I was willing to work with them on a case where a franchisee was trying to sell somebody else's ice cream through its franchise stores. There is a precedent for this specific dispute. It's a case where a franchisee complained that Baskin Robbins was tying its ice cream to its franchise: the franchisee wanted to purchase their ice cream from somebody else, at a cheaper price, and then resell it as in his Baskin Robbins store. The court decided that consumers, when they go to a Baskin Robbins ice cream store, expect to get Baskin Robbins ice cream, and that is indeed what they ought to be getting at a Baskin Robbins ice cream store. In this particular case, the Supreme court said the ice cream and the name of the store were the same thing in consumers' mind, and therefore, a Baskin Robbins franchisee had to sell Baskin Robbins ice cream, even if it would be cheaper for them to get some other ice cream. But my point is that franchisees have tried, actually, to sell the unbranded, cheaper, ice cream in their branded stores.

The court decided that there was no tying involved in the Baskin Robbins case basically because the product that franchisees had to purchase from the franchisor and the name of the store they were operating under were one and the same product. In other cases, franchisors have been told they cannot require franchisees to buy inputs only from them. That is, courts have said that franchisees already purchase one product from their franchisor, which is the business format and brand for which they pay royalties, and so if franchisors require that they buy other, separate products from them, this is tying. Franchisors have responded that they need this for quality control, but the courts have said that they should set criteria for the desired characteristics of products, or use approved suppliers. In the case of Baskin Robbins, the brand name and the ice cream are too connected to be able to just have quality standards, but for other kinds of inputs the courts have said quality standards should suffice. The case that established this view is the Chicken Delight case which was decided in the early 70's. It set the legal precedent that if you are selling sandwiches, as a franchisor, you should be able to tell franchisees that they ought to use this kind of chicken and this kind of bread, but you shouldn't need to tell them that they have to buy all of the chicken and all of the bread from you. So McDonalds in

fact does not sell the beef, the bread and other ingredients to its franchisees. What they do is tell them that they can get those products from this or that supplier.

To be clear, this does not mean that franchisors that are not in Baskin Robbins' shoes never sell any inputs to their franchisees. Some franchisors do sell a lot of stuff to their franchisees. But the difference is they typically do not require franchisees to buy. For example, Domino's has changed its whole structure so that it can now sell most of the inputs its restaurants need directly. They were sued at the time, though, by some franchisees who argued that Domino's was illegally tying the purchase of inputs as a requirement to purchase the business format, and that it was an illegal tie. The courts, however, disagreed, stating that Domino's did not have market power in the market for ingredients except if the market was defined as ingredients that Domino's franchisees need to purchase. But the latter was not a market and therefore Domino's did not have market power in the relevant market, a prerequisite for an illegal tying case.

In the end, tying is a solution to this problem of input substitution, but tying can be treated quite harshly by the antitrust authorities (as in the Chicken Delight case).

Student Question: If franchisors are not allowed to require franchisees to purchase inputs from them directly, how can they make sure products meet their requirements for quality and consistency?

That is why they have "approved supplier programs." As a franchisee, you are allowed to buy only from those manufacturers whose product the franchisor has inspected and approved a priori. Usually, franchisors will name a couple such suppliers in each neighborhood or region, so franchisees have some choices.

Student Question: So the franchisees have to go to particular suppliers, they cannot go to buy whatever they want wherever they want?

That is right, they cannot just go to any supplier. The court did not say that franchisors could not control quality. What it said was that it would be sufficient to have approved supplier programs to control quality for most of the products that franchisees purchase. So it was not necessary for the franchisor to be the sole provider of inputs to their franchisees. Now in something like KFC, with the 11 herbs and spices, there is a secret formula that no one knows. KFC gets to be the exclusive seller of this mix of herbs and spices, but then for the chicken, they have approved suppliers. For the herbs and spices, it's back to the Baskin Robbins ice cream case where the product and the business format are one and the same – when the product is part of what the franchisor and the franchised system

are, requiring that franchisees buy it from the franchisor only is OK and allowed. For other inputs, it is more problematic.

I talked at the beginning about dealer free riding in terms of good or bad service at a particular location. So, for example, a doughnut franchisee may not throw away its doughnuts after a day on the shelves even though the franchisor requires that. The problem with such behavior on the part of a franchisee is that it affects the reputation of the whole chain negatively. Solutions to this problem would include things like making sure that the franchisee makes enough money off of these doughnuts – either by setting minimum resale prices or protecting the retailer from competition via an exclusive territory – so that they will have incentives to try and hold on to those profits. One version of this argument says that such profits would lead franchisees to compete in quality with other potential franchisees – this is why manufacturers would use minimum prices or exclusive territories. Another version says that franchisees will not want to be caught cheating on quality if they make high profits and getting caught cheating on quality means they are likely to lose the franchise and associated profits. To make sure they don't lose a highly profitable franchise, in fact, franchisees will choose not to do the wrong thing. Those are two different kind of arguments by which minimum resale price maintenance can solve dealer free-riding problems. Exclusive territories do the same thing. Again, they provide secure profits for the retailer and that gives them incentives not to cheat.

Student Question: But isn't minimum resale price maintenance illegal?

Yes, that is right! What I am trying to do right now is describe arguments that you can make for these different kinds of restraints. But minimum resale price maintenance is illegal *per se*. What we will do when we get to the public policy materials later on in the lecture is see that resale price maintenance is illegal *per se*, but exclusive territories are treated under a rule of reason. Since both of these vertical restraints can help solve the problem of dealer free riding, this makes for pretty inconsistent public policy. And being aware of which restraint is illegal and which is not, as a means of achieving the same ends, can be a pretty useful thing for a future manager like you.

Slide #18

Yet another efficiency argument for vertical restraints is that manufacturers sometimes want dealers to invest quite a bit in their dealerships. And of course dealers won't want to do that unless they have some kind of protection for their investments. Exclusive territories and contract duration clauses can protect dealer investments. Some guarantees against termination and non-renewal are useful here too.

All of the motives for vertical restraints that we have talked about so far are efficiency arguments because when vertical restraints are used to address these, they actually make markets work better. What that means is ultimately manufacturers sell more and consumers are better off. So all of those arguments are ones that, if you as a manufacturer are imposing vertical restraints, you can rely on these arguments and as long as the explanation is believable, the court should say well, yes, it makes sense that you are using these restraints then, and it is a good thing that you are doing it, we should not interfere... So, when Professor Suslow was saying you need to have a business justification for doing something - these are them. These arguments are the reasons why we don't want to make these restraints *per se* illegal. Or, rather why we shouldn't. We don't want the antitrust authorities to prevent their use for the very valid purposes we have described so far. However, there are reasons why firms want to use these restraints that, from an antitrust perspective, are objectionable, and in those cases we will want to prevent their use. Before I move to those, I am squeezing in my price discrimination argument and one example of that, in gasoline retailing.

Slide #19

Most gasoline station owners that are resellers of a single brand of gasoline -- branded stations -- are subject, in their contract, to something called single sourcing. Oil companies/refiners typically have their own trucks that they send out to gasoline stations to supply the gasoline stations, but they also distribute gasoline through what are called jobbers, which are fundamentally wholesalers in that industry. These jobbers normally are awarded exclusive territories, that is they are only allowed to provide gasoline for the stations that are in their region and nowhere else. They then also become the only source of gasoline for stations in their territories -- thus the expression single sourcing. Gasoline station owners often say that they would like to have all the jobbers that distribute their brand of gasoline instead bid against one another in providing them with their branded gasoline. In other words, they are happy to operate under a given brand, and agree to buy only one particular refiner's gasoline, but would like all the wholesalers of this refiner to compete with one another in the wholesale market. The oil companies, on the other hand, don't want the jobbers to sell across territories. The reason is that the oil companies actually charge different prices to jobbers in different regions, and of course they could not do that if the jobbers competed with each other. Also, the oil companies want the price discrimination that single sourcing gives rise to at the retail level as well.

Since the price of gasoline has been high recently, gasoline retailers have been arguing that the government ought to make single sourcing illegal. The retailers say that they would then be able to sell gasoline at a lower price because they would get it at the lowest possible price. The oil companies are countering

“no,” if you eliminate single sourcing mostly what that will do is make it a uniform price, but that uniform price will not be lower for everybody. It will be a kind of average price, and that takes us back again to your core microeconomics course when we were doing market segmentation. We saw that, under price discrimination, you get different prices based on differences in demand elasticity. But if you average out the prices and set the same price in all markets, this price will be somewhere between all the prices you had, and at that new price consumers need not be better off than before. Some likely will be, but others would not. So the consequences in the end, for consumers, are unclear. Again this relates to the fact that we don’t have clear welfare implications for price discrimination – the welfare effects vary depending on many different factors. We know only that if the uniform price is such that total quantity goes up, then society will tend to be better off (assuming away any desire to reduce gasoline consumption for other, such as environmental, reasons). If the uniform price is such that quantity goes down, as a whole we are worse off.

In the end, this price discrimination motive is not the easiest for a firm to use as a business justification because of this ambiguity. On the other hand, this same ambiguity is why it is not generally illegal to price discriminate. However, price discrimination may get you in trouble in a manufacturer/reseller context like this one because of the Robinson-Patman act.

Slide #20

Now let me talk about those things that the antitrust authorities really worry about: anti-competitive motives for these restraints. The first concern relates to dealer cartels. What the antitrust authorities are worried about here is that, if the manufacturer sets the price for something through resale price maintenance, it will be easier for dealers to collude. In fact, resale price maintenance is a mechanism by which dealers could automatically “coordinate” their prices. If the price is to be fixed externally to the dealers, it can in particular be fixed at the collusive level, and dealers can then have a stable cartel because they don’t need to go through finding a way to agree on a common price and enforce it. Basically, the manufacturer does all this for them. For example, in gasoline retailing we see stories of collusion in the news sometimes, but also stories about local price wars and breakdowns in collusion. Well, if the oil refiners were saying what the price has to be for all their dealers at every point in time, it would make collusion easier. That is the worry.

Along the same line, antitrust authorities worry that exclusive territories eliminate competition within the same brand locally, and so these can make collusion at the retail level easier because, first, it makes for smaller number coordination, and second, it reduces concerns over cheating since each retailer has its own customers. Perhaps even worse for the antitrust authorities is the fact that

with exclusive territories, the manufacturers also prevent entry and thus further reduce competition.

The issue that these anti-competitive motives for vertical restraints raise is: Why would a manufacturer ever do this willingly? This takes us back to the question that was raised when I was talking about using two-part tariffs before I introduced the lump-sum transfer part of the tariff: selling at marginal cost did not seem like a very profitable strategy for the manufacturer to pursue. Here the dealers are given exclusive territories and they make profits thanks to these, but if there is no lump-sum transfer, it cannot be worth the manufacturer's while. The dealers get to behave as members of a cartel: They charge high prices and they sell small quantities. But the manufacturer who has allowed them to do this via the restraints it has set isn't getting any payback! Not only that, but quantities sold are lower this way than if the dealers were not allowed to collude... So the manufacturer is worse off than if there was not any collusion downstream, it doesn't make a lot of sense for a manufacturer to be doing this. That's the main counter argument to these dealer cartel motives for vertical restraints. But if the manufacturer gets some payback, somehow, this argument becomes potentially more believable.

Slide #21

Another anti-competitive argument as to why firms use vertical restraints has to do with upstream coordination. Suppose just two firms are competing upstream. These two firms would like to soften the competition between them, not be as aggressive with one another. One way to do this is to go through resellers that have market power locally. For the soft-drink industry, for example, this would mean selling via independent bottlers that have exclusive territories and operate under exclusive dealing arrangements as well. The reason that this softens competition between say Coke and Pepsi is exactly because the bottlers do, as per our earlier analyses, impose a second margin. If the upstream industry was a monopoly, it would never want the double margins, nor independent bottlers with market power. But when the manufacturers face competition upstream, having intermediaries that will increase the price to ultimate consumers is a credible way to soften competition in the industry and raise prices.

Student Question: Do you think this is really why soft-drink manufacturers have bottlers?

Personally, no, I don't think this is the reason. There are all sorts of issues associated with reaching customers in local markets that I think gave rise to the way soft-drink distribution is organized. I think it is important for you to know

about this argument though, because you may see it one day, perhaps even in an antitrust case.

Student Question: I am not sure how the manufacturers benefit from this? Can you explain this again?

Okay, let me do this by first going back to my monopolist when I talked about double margins. The monopolist looks at its vertical chain, and he says: The price is too high at the end, I don't like that. And so he wants to impose a maximum price. Now, replace my monopolist upstream by a perfectly competitive industry. Because each firm upstream is an atom, they sell at cost to the retailers and make zero profits. What they would like to do is to reduce the intensity of competition in their own market, upstream. They can do this if they have resellers that have market power. By going through these, they create "vertical chains" that earn above normal returns thanks to the market power of the downstream firms. Specifically, say that manufacturers sell to retailers at costs, then the retailers will each impose their margin, and we end up with the price that would have occurred if the upstream seller had been a monopolist, and the bottlers had been in a competitive industry... But the profits are all going to be at the bottler's level, contrary to what the upstream firms aimed to do: the manufacturers will need to require lump-sums transfers again to get at least some of the profits generated through the chain.

Note that in this story, if the manufacturers instead sold directly to consumers, they would be so aggressive amongst themselves that they would have just sold at cost and made zero profit. The idea then is that the intermediaries just prevent the upstream firms from being as harsh as they would have been otherwise among themselves. This is one of the cases where manufacturers actually want to vertically disintegrate. But you also need the exclusive territories and exclusive dealing between upstream and downstream firms, and lump-sum transfers for the manufacturers – this scenario therefore involves several vertical restraints that together "facilitate" upstream collusion or soften upstream competition.

[Slide #22](#)

The most important antitrust argument against vertical restraints, however, relates to foreclosure, namely the possibility that by instituting these restraints, manufacturers can prevent other firms from entering into their market. Think about exclusive dealing. When I impose this as a manufacturer, I have retailers that sell only my brand. Suppose then that I'm 3M and so I have more than 90% of the cellophane tape market. I am absolutely dominant in this market. Then, if I go to retailers and ask them to sign an exclusive deal with me for cellophane

tape, I am so important to each retailer that they will all agree to sign, and there will be no retailer left to sell anybody else's cellophane tape. In other words, other manufacturers won't ever have access to customers because the retailers can't afford not to have my brand of tape on their shelf. That's foreclosure: It's when a firm with market power convinces so many resellers to sign an exclusive contract that other manufacturers, existing or potential, are prevented from selling their product. This is really the central anti-competitive argument for why firms use vertical restraints, and is also what the antitrust authorities are most intent on preventing.

A related issue: the notion of essential facilities. Think of a gate at an airport – airlines cannot operate at an airport if they don't have a gate. So gates are an essential facility. If one particular airline successfully negotiates a contract by which it controls all the gates at a particular airport and gets to allocate them to the other airlines, airlines that the main airline company doesn't want to favor may not obtain gates and as a result won't have access to that airport. So when firms depend on some facility that is controlled by their competitor, the competitor again might choose to reduce the amount of competition it faces by foreclosing access to this resource.

Another related concept: raising rivals costs. In this case, instead of completely preventing another airline from having a gate at an airport, the airline that controls that airport just says well for each airplane that lands here, I will charge say \$5,000. Assuming this is much higher than the costs incurred, the firm that controls the gates is raising the cost of every airliner that wants to use that airport, and as a result putting them at a disadvantage.

These are really the type of situations and behaviors that worry the antitrust authorities because what this means is that a firm that has some dominance somewhere - notice that I have an airliner that owns or controls the gates, or I've got 3M that has almost all the cellulose tape market - may prevent other firms from eroding its market position, or from getting a foothold in its market. In other words, such a firm can make it impossible for competition to arise or become more intense in its market – and the job of the antitrust authorities is exactly to protect competition, to make sure firms can enter new markets and increase the intensity of competition if they choose to do so.

Foreclosure by the way is what got Toys "R" Us in trouble in the late 1990s. What Toys "R" Us did was go to its suppliers, the main toy manufacturers, and tell them that if they sold their products to COSTCO or Sam's Warehouse, or other such retailers, Toys "R" Us would no longer buy from them. Notice that this is exclusive dealing in reverse – it is not the manufacturer asking the retailer to sell nothing else but their product, it is the retailer requesting that it be the sole retailer to carry the product. The toy manufacturers thought to themselves that Toys "R" Us was their main retailer, and if they were not on that

chain's shelves, they would lose access to too many customers, so most of them agreed to the terms set by Toys“R”Us. A few of them didn't though. Nintendo, in particular, didn't because it had other types of retailers through which it could sell, electronic stores in particular. Some of the manufacturers that agreed also then cheated a little too. But fundamentally, Toys“R”Us convinced many to do this, and then was found guilty of having imposed vertical restraints on suppliers to maintain its dominant position in the toy retailing industry rather than to curb “warehouse” free-riding problems. Importantly, however, it was also found guilty of having orchestrated a horizontal agreement among toy manufacturers – making it easier for the toy manufacturers to refuse to sell to club warehouses. If any of them deviated and sold to club warehouses, then the other ones would break their agreement too because they would not want to lose the customers that went to that other manufacturer via this alternative channel. By imposing its constraint, Toys“R”Us made it easier for all the manufacturers to “agree” not to sell their products to the heavy discounters that these club warehouses are. This case, and the ensuing decisions, clearly contributed to Toys“R”Us lackluster performance in the late 1990s and early 2000s.

Having said all of this, to argue that a firm has foreclosed entry or raised its rivals' costs by its choice of vertical restraints or other practices, there really must be an access issue, or no alternative route for competitors to gain access. And even then, it's not necessarily that straightforward. For example, when Timex started to sell cheap watches made without the use of any jewels, it found that the standard channel of distribution for watches, which were jewelry stores, didn't want to have a cheap watch on their shelves. The margins were too low, and the watches could not be repaired. The jewelry stores simply did not like that concept of “throw” away watches. So access to customers was in some sense foreclosed not so much because of anything that the other watch manufacturers had done, or because of vertical restraints. The jewelry stores, as a channel, simply said: thanks but no thanks, we think this type of watch is a bad idea. What Timex did was to turn around and go to drugstores and supermarkets and even hardware stores to reach customers and that turned out to be a great way to sell their new kind of watch. Through these alternative channels, they reached customers who wanted cheap watches as opposed to customers who went to jewelry stores to buy expensive jewelry. And thanks to this strategy, Timex was able to get the product to consumers at an even cheaper price.

The point of this last example is that, suppose 3M in fact negotiates with all of the retailers that sell cellophane tape currently. There might still be other channels through which one could sell the same product, and you may be able to make a killing there if you put in a little bit of imagination. In the case of 3M, I should say, the court decided there really wasn't. And it is true that their tape is sold in supermarkets, in department stores, and through many other kinds of

retailer, so I tend to agree in that particular case. But in other cases, there may be substitute ways to get the distribution services or “essential facility” that you need.

Slide #23

The other related worry for the antitrust authorities is called leveraging. That is when a monopolist extends its market power beyond the market in which they are already dominant. For example, 3M again has market power in branded cellophane tape, so when it offered bundled rebates, where the rebates were based on combined purchases of such tape and other products, the worry was that it might extend its market power to these other products. Since retailers want 3M's Scotch Tape, they will find it in their best interest to also buy the bundled products from 3M so they can get higher total rebates.

In general, tying is the vertical restraint that the antitrust authorities worry firms might use to leverage their market power from one product to another. Think of leveraging as “extending” your monopoly power from the thing that you do have monopoly power over to other things.

Note that vertical integration raises exactly the same kind of “leveraging” concerns. When the antitrust authorities look at a case of vertical integration, they will try and block it if they feel it might allow the vertically integrated firm to foreclose entry or leverage its monopoly power.

Student Question: I don't understand what it means for them to worry about foreclosure or leveraging. If there is a merger, then we are talking about what a firm does inside – about its transfer prices, and other internal decisions. How could the antitrust authorities interfere in these?

The antitrust authorities and/or the courts will sometimes have settlements or judgments where the firm agrees to do or not do certain things, and it agrees to a mechanism by which its conduct will be monitored. The 2001 Final Judgment against Microsoft, for example, contains a series of clauses related to what the firm can and cannot do, and how the plaintiffs will be able to know what it does. The judgment in particular stipulates that a committee of three people must be created to oversee Microsoft and make sure the company abides by the terms of the final judgment.

At other times, for example in cases of vertical mergers where the antitrust authorities worry about foreclosure, say, what they do is to force the merging firms to divest some subsidiaries or outlets so that there hopefully won't be opportunities for foreclosure after integration. We have seen this, for example, when retail chains or oil companies have merged.

Slides #24 and #25

Going back to the big picture on vertical restraints, anti-competitive outcomes are reasons why society wants to ban certain practices, whereas we want to allow those things that lead to greater efficiency. The question we now turn to is: how have the governments in fact treated the vertical restraints we have been talking about?

Slide #26

There is one big difference that I have already mentioned between how antitrust authorities treat price and non-price restraints. Part of the reason for this is that resale price maintenance, or vertical price restraints, is associated in people's minds with price fixing – the horizontal version which is *per se* illegal. This is in part why we have stricter rules on vertical price controls.

Having said that we treat price and non-price restraints differently, there is one other thing I need to mention, which is the notion of unilateral restraint. If a restraint is unilateral, the Colgate doctrine in the U.S. (which refers to a 1919 Supreme Court decision) says that it's okay. Even on price, a manufacturer can shout, "I will not sell to anyone who tries to sell my product at a price below this" and that's okay. What is not okay is if a dealer complains to the manufacturer that another dealer has sold below that price, and the manufacturer then terminates or punishes the dealer that undercut the price. That's an agreement. It's not a unilateral restraint anymore because another dealer has been involved in the monitoring and in that sense the "agreement," and that gives this whole process some horizontal aspect. The restraint and its enforcement have to involve the manufacturer and the dealer only. If it involves anybody else, then there is an agreement, and it's a problem. Of course, this makes for a very fine line between what is legal and what is not. Even minimum resale price maintenance, which is *per se* illegal, can be imposed "unilaterally." Which is why there are lots of products for which you will see no price variation whatsoever when you go across different retailers. The retailers will tell you that the manufacturer says they cannot sell below this price. This can be done if it is unilateral.

On the non-price stuff, it's all rule of reason – except for tying which can also be *per se* illegal. Price is *per se* illegal unless the manufacturer imposes a maximum only, in which case it is rule of reason. And this is despite the fact that price and non-price restraints often achieve the same goals!

Finally, vertical integration is not typically treated harshly – yet it allows the firms to do the same things as the restraints do. In fact, as we discussed, firms often use restraints when vertical integration is not an option. But their goal is to get the same results as under vertical integration, and in that sense it is somewhat disconcerting that they cannot do things via contracts that they can if they integrate, and that we treat integration rather gently.

I wanted to at least mention these few things about public policy before the break. Now let's take a five minute break, and pick things up at this point afterwards.

Slide #27

Welcome back!

I will continue where we left off, talking about public policy. As I said, non-price restraints are treated under the rule of reason, and this has been true since the early 70's in the U.S. Since 1999, they are treated under an equivalent criterion in the European Union too. Up until that point, public policy towards vertical restraints in the EU involved a general prohibition against such restraints, and then a series of what were called block exemptions. Franchising had such a block exemption. That meant that franchisors could use lots of restraints as long as the exemption covered these restraints. But now the European Union has vertical restraints guidelines, and they treat non-price restraints much like we do in the U.S.

They have, however, done one thing more explicitly in their guidelines, that is they have put in a clear safe harbor. This takes us back to this notion of dominant firm that Professor Suslow talked about, and that I have mentioned a few times too via the examples I have used. If you are not a dominant firm, meaning in this case that you have less than 30% of the market, as far as the European Union is concerned, you can impose whatever vertical restraint you want, with just a couple of exceptions. Even when not dominant, you cannot impose minimum resale prices. Maximum is okay, but no minimum and no specific prices. Also, no territorial restraints. In Europe, they are really worried about territorial restraints. This is because part of the idea of creating the European Union was to eliminate restrictions on commerce across national boundaries, and so they don't want restraints that define territories, especially territories based on nationality. In the U.S., there is not a direct equivalent to a safe harbor – still, the firm has to have market power before the antitrust authorities worry about its use of vertical restraints.

Slide #28

So what does it mean for non-price vertical restraints to be judged mostly on the basis of a rule of reason? It means that the antitrust authorities weigh the benefits and costs of different practices under the specific circumstances of the case. So if a firm that has market power can make a serious efficiency argument, the antitrust authorities are likely to see that there are more benefits than costs to the use of the restraints, and that will tip the balance in the firm's favor. They will worry more if 1- the firm has a dominant position in the market, and 2- the vertical restraints

are expected to have some form of horizontal consequences, i.e., the manufacturers or the dealers might be better able to collude among themselves.

Slide #29

This slide simply summarizes the public policy towards price restraints that we have now talked about. As I said, maximum resale price is now under a rule of reason since the 1997 Khan decision, and minimum and specific prices are still *per se* illegal, but subject to the Colgate doctrine, namely the legality of unilateral restraints. Minimum and specific prices are also illegal in Europe – no safe harbor as mentioned above.

Slide #30

Having said all this, there is another public policy twist that I want to discuss, which is that lots of jurisdictions have rules that are specific to particular industries. For example, we have something in the U.S. called the Petroleum Marketing Practices Act that covers various aspects of the relationships oil companies can have with their independent and lessee dealers. It includes in particular rules concerning termination and some other aspects of the relationship. We also have “dealer day-in-court” laws specify the conditions under which a new car dealer can be created, and when a car dealer can be terminated, and so on. These laws also have prevented car manufacturers, for example, from selling cars directly to customers over the internet. We also have liquor distribution laws in the U.S. that go back to the prohibition era – or more precisely to when prohibition was repealed. At the time, the federal government gave jurisdiction to the states to decide how alcohol might be distributed within each state. That resulted in laws like the one we have in Michigan. I will get back to that in a second. In Maryland, an oil company also cannot own a gasoline station. That is illegal because Maryland has enacted a divorce law for gasoline distribution. In Europe also, car dealers are treated as a special case.

Many of these special industry laws interestingly mean that the government is forcing manufacturers to give exclusive territories to their dealers even though, at the same time, antitrust authorities might prosecute companies in other industries for choosing to offer territories to their dealers! So different levels of government pursue contradictory goals with all these laws.

Slide #31

So let’s look back at the Michigan wine and beer distribution law. This law was enacted in 1933, and it established something called the Liquor Control Commission, which forces what is referred to as “the three-tier system.” The goal of this law is to keep some control over the distribution of alcohol in Michigan, the notion being that left to its own devices, this market will degenerate to one

where producers and retailers sell to minors, and alcohol is found everywhere. The goal of antitrust laws, in contrast, is to protect competition and make sure products – including alcohol - are available at the lowest cost possible to consumers. These, of course, are not congruent goals.

The three tiers in the Michigan system are manufacturers, i.e., brewers and wineries, then distributors, also known as wholesalers, and then retailers. By law, no person that has one of these can own anything in another tier. Vertical integration is completely banned. The law also imposes exclusive territories for the wholesalers and requires licensing for retailers, restricting their numbers. What this all means is that we have a chain of local monopolies, each imposing its margin over the other. The law also prevents me from getting California wines sent to my home directly from California wineries, even though I can get such direct shipments if I buy from a Michigan winery.

There is a lot of action on this last aspect of this law these days – and a few similar laws in other US States – with a court case currently at the Supreme Court.¹ You can visit this website (freethegrapes.org) if you are interested in learning more about this whole dispute about the regulation of the wine and beer distribution industry. The move toward freer movement across states in particular attacks wholesalers in regulated states. They want to maintain their exclusive rights to buy and resale beer and wine in each state, as this has been a very profitable position for them to be in.

Slides # 32-38

As I mentioned when we got started, I have put on the last few slides short descriptions of a few legal cases where vertical restraints issues came up. Professor Suslow has talked about a couple of them already, as have I, and I won't really go back into the details of these cases at this point. They include the Coca-Cola case about loyalty bonuses. Remember the safe harbor I mentioned at 30% in the European Union. Well Coke now has agreed that in any country in Europe where it has over 40% of the market, it will no longer use exclusivity deals with retailers, will not impose "full-line forcing," and will allow other brands to be sold in Coke-branded refrigerators.

LePage and 3M – well we have talked about this case earlier too. There was no question about 3M being a dominant firm in the cellophane tape market. During the whole trial, 3M argued this case in terms of predatory pricing, showing it was not pricing below cost. But the case was not about predatory

¹ Post-lecture update: The decision, rendered on May 18, 2005, was that states could not allow in-state wineries to ship to consumers while at the same time prohibiting out-of-state wineries to do the same, as Michigan law did. In December 2005, the state of Michigan enacted a new law that allows licensed in and out-of-state wineries to ship up to 1500 cases per year directly to Michigan consumers.

pricing, it was about tying! And 3M ultimately was found guilty. After that decision, and after the Supreme Court declined to revisit the matter, other, private suits were filed. Meijer Inc. in particular filed a class action suit against 3M. Publix also has filed a class action suit for supermarkets, and they have just settled with 3M for about \$100 million in compensation. These cases highlight some of the indirect and costly consequences for a company of facing an antitrust judgment that says the company has violated antitrust laws. Given that plaintiffs can obtain treble damages, they have strong incentives to file private cases after such a decision.

Of course, I also mention the Toys“R”Us case in these slides. Again a flurry of private cases followed the guilty verdict, some of which were settled fairly recently. In particular, three toy manufacturers and Toys “R” Us settled some of those cases for \$56 million not too long ago.

Finally, I want to mention one case that ended in a settlement. It can be worthwhile to settle antitrust cases because then you won’t face the private suits that we just saw typically follow guilty verdicts against you. In this last case, two retailers, Federated and May department stores, worked with a couple of dinnerware manufacturers to try and prevent those manufacturers from selling to Bed, Bath & Beyond, a discounter. In that sense, this case is quite similar to the Toys“R”Us case. As I said, in the end, the four settled and agreed to pay \$2.9 million in penalty. The thing that is important about this case in my view, however, is that it relates to a very standard practice in retailing, the use of exclusives. So remember, if you give exclusives, you have to offer them unilaterally again! You can’t do this with an agreement, especially one that involves more than one store and one of your competitors as well!

Slide #39

So, in the end, what can companies do? Let me conclude this lecture with a few thoughts on that.

First, and foremost, here is a message that hopefully has made it through the whole lecture series: If you work in a firm that is dominant in its market, be careful!! You don’t need to be so careful if you work in a company with a small market share. Of course, keep in mind that you have to be clear about what market definition you are using to make your company “small” – if the antitrust authorities don’t buy your definition, you may be in a company that is more “dominant” than you think!

A second lesson here is that policies – rebates, pricing, retailer incentives – that connect your different products can be dangerous. If you have market power in one product category, try not to combine this product with others in designing retailer incentives. Doing anything that combines a product where you have a dominant position with other products is asking for trouble. This is a

somewhat new development in these types of cases, and one you need to take into account now that precedents are being set here and in Europe.

A third lesson is: non-price restraints generally are less problematic than price restraints ... and since they can often achieve the same results as price restraints, well, let's put it this way, always look for the non-price restraint that will do the job for you.

Fourth lesson: in the US in particular, when it comes to your relationship with suppliers or resellers, you should always do things unilaterally! Don't go to other manufacturers or other retailers before deciding on your policies. And don't use other dealers as a monitoring device either. Do your own policing and enforcement.

And, finally, a fifth lesson, which is something Professor Suslow insisted on quite a bit, but let me repeat it here: always have a good business justification, a reason why you did this or that. Find ways to articulate your policies in terms of customer benefits, to always have something to say about that.

Student Question: On this Federated and Bed, Bath & Beyond case – it seems very silly to me, it would have been very easy say for May Department Store to just have an exclusive with a manufacturer and not talk to Federated about it. And for one manufacturer to set up an exclusive deal with each of these stores without talking to the other manufacturer. In all cases they could make sure their competitor knew by advertising in the press. Obviously talking to their competitor was going to get them in trouble!

Prof. Suslow: Well yes, they could have signaled and hoped that their competitor realizes what they are doing and why, and hoped their competitors would copy their action ... that would not be exactly the same, it's a meeting of the minds but it's done differently... but there is a risk in doing that because if you, as manufacturer, limit your sales to Bed, Bath & Beyond, and your competitor does not, well then you have a problem. So, in part, this is a trust issue: can you trust that your competitor will understand your signals and choose to copy your actions...It's easier if you can make a more formal agreement!

Right, as a manufacturer, you worry that if you restrict your sales to Bed, Bath & Beyond, your competitors are going to get access to those customers and you won't. But what you are picking up on in the case is that there are two stores here, and two manufacturers as well, and they talked about this to their own competitor, and obviously that's not a good thing to do, as Professor Suslow made clear in her lectures. There is another issue however, which is that the two retailers in this case talked to manufacturers about a third retailer, and from a

vertical perspective that is problematic too. A horizontal agreement is always problematic ... from a vertical perspective, if Federated say had just talked to Lennox and said “if you sell this product line to other retailers, we won’t buy from you anymore” - that would have been fine. What they did instead was to say we’ll agree to you selling to us and May but not to Bed, Bath and Beyond, and that is a vertical agreement. It’s not a unilateral statement that if you do this, I will do that, it’s “we agree” that we will do this and that. That can be a subtle difference – but it matters.

Prof. Suslow: And you would think that given their history, they would have been able to find an alternative way to achieve their goal instead of going for an explicit agreement. But they didn’t ...

Student Question: I thought Lennox could have put an ad in the newspaper saying they will not sell to Bed, Bath & Beyond because selling through this type of discount store is diluting our brand. And then Waterford Wedgwood would have likely gone along with that too!

And that would have been fine. I guess this is in part why we did this lecture series ... you personally won’t go and try to make this type of agreement with your competitors and resellers, hopefully, right? Then we will have done our job.

Let me end on that note. I am going to say again, thanks a lot everybody for attending these lectures. It has been great to see you a little bit during your last semester here! Best of luck with everything!

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