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FREDERICK SALVUCCI: The last time we talked a little bit about Baumol's disease and why it affects products that are not seeing technological change that saves cost. And not seeing import substitution that might reduce cost. So they tend to grow at faster than the rate of inflation. And transit is one of those activities.

And what happens is, the public sector ends up either taking the responsibility to provide those services, or subsidizes private parties to provide those services. Other services will die or there's some combination of the two. The services get cut back, and then some set of services that are viewed as too important to allow to disappear the government subsidizes for. What do you do about it? Yes?

AUDIENCE: Just curious, what are some other things that you consider subject to this problem, outside of public transportation [INAUDIBLE] like emergency medical, like fire.

FREDERICK SALVUCCI: Well certainly fire protection services, police, teaching, education generally, the health care. So what's the cost problem in health care? No technological change going on in health care?

AUDIENCE: Nothing cost reducing.

FREDERICK SALVUCCI: Nothing cost reducing. A sneaky phrase that I put in was cost reducing technology. In health care, there's a lot of technology, but it generally increases costs. Once there's a better way to deal with cancer, we all want it for our parents, our kids, ourselves. So technology and health care tends to drive costs up. For maybe a good thing. It means we're getting more quality, but from a cost point of view, it's cost. Yes.

The cynics think that's a bad thing because you cost more money. Better you should die quickly of some disease than hang around and need more health care. So it gets at some philosophical questions. But it's just from a practical point of view. Baumol's disease is a serious problem that affects public services. And it particularly affects public transit, which is what we're interested here.

So I don't think we talked about this last time. So what did Baumol say happens with an activity that's afflicted by Baumol's class disease?

AUDIENCE:

To hire the people who perform that activity, they need to-- their salary needs to be adjusted to inflation. But you're essentially paying them more and more for producing the same amount. That's where-- that goes the musician example. Because if you want to hear live music, paying musicians 100, 200 years goes the same thing. You have to pay them. You had to pay back then, you pay today. But today they pay rent or whatever it is today.

FREDERICK

SALVUCCI:

So what's the-- what's Baumol's argument about how you could continue to have four string quartets performed if you choose to? You're going to subsidize them. But what's the economic rationale that he makes? His argument is, assuming there's productivity improvement in the economy overall, the overall gross domestic product is going up.

So you actually could afford to subsidize these activities, music, if you had health care, whatever. And you'd still have a surplus because there's been enough growth. Since it's the-- since it's the technological change that is a factor in the increased wages, then-- and here the theory is that in the parts of the economy that are experiencing introduction of cost saving technologies, labor will be able to get pay increases higher than the rate of inflation, because they're in a position to leverage that growing productivity. Are you with me on that?

So now, the worker and industry A that has productivity improvements gets pay increases beyond the rate of inflation. But if I'm trying to hire bus drivers, the bus driver wants the same pay because he's living in the same metropolitan area, paying the same rent. So the bus driver wants to get the same pay increases that the worker in the more highly productive sector is getting. So embedded within the productivity improvement is a wage increase.

Now there's a presumption there that labor does get a proportionate share of the productivity improvement. Recently that has not been happening. For a long time that appeared to be the case when Baumol was writing. So you end up with the technologically advancing sector needing to pay higher wages. The more stagnant sectors needing to pay comparable salaries to attract labor, because they're working in the same market. And therefore, larger and larger subsidies in those sectors where productivity is not improving.

AUDIENCE:

So a couple of questions. One, I guess this assumes full employment. If there wasn't full employment, then you would pay bus drivers less than the more technologically advanced

employees.

FREDERICK SALVUCCI: Well it assumes full employment would be one way to think about it. But if there's not full employment, but the workers are organized, and in transit they're very organized. And they're able to command-- they're able to bargain for higher wages because they can make the comparison to what other workers make with similar educational background. And even though there are unemployed people there, because the union is able to control the workplace to some degree, even full employment isn't a necessary condition for this problem to occur and to grow.

AUDIENCE: Being organized is the necessary condition [INAUDIBLE]

FREDERICK SALVUCCI: Yes. I would argue being organized is more important than full employment.

AUDIENCE: And is that because, the way I think about is that because transport is such an essential service? For example, when I was in London the tube shut down like 15 times for strikes. And the government is really resistant to increasing wages, giving into their demands. But eventually they have to because you're losing a billions dollars in the economy or something like that every time you shut down the Tube for a day.

FREDERICK SALVUCCI: Yes. So-- Yes, so it's the practical consequences. Labor has a lot of leverage. And if you think about the areas we're talking about, they tend to be areas that have a high labor content. Or they wouldn't be so vulnerable. By the very-- it's a circular logic.

They are vulnerable to Baumol's disease because they employ a lot of local labor. And the productivity is not increasing with technology change. Therefore, they've got a growing problem. And the problem is compounded because the workers being numerous, and organized, are able to get those higher pays. So you're in a bit of a bind.

So what do you-- you can simply pay more. But the other consequence of having the government into the subsidy business is that other agendas then accumulate. If Mussolini is in charge, then you have to join the Fascist Party or you're not allowed to sing. If Obama is in charge or some other elected official that you like better than Mussolini, you're still going to get some political exactions attached to subsidy. Because get-- the process of getting subsidy through a legislative process gives people leverage.

And there's a particular problem. Why might the problem be worse for transit than it is, say for

education? Assume for the sake of argument, education and transit are similarly dominated by local labor, and similarly if afflicted with Baumol's disease. Why might the leverage issue be different in the legislative bodies?

AUDIENCE: In many ways the teachers are like [INAUDIBLE] employees maybe more than the bus driver [INAUDIBLE] Is it because education is compulsory [INAUDIBLE] probably why [INAUDIBLE]

FREDERICK SALVUCCI: Well not so much that. It's much more Universal. Kids in Springfield need to go to school. Kids all over Massachusetts need to go to school. North Adams and Pittsfield don't require the same amount of transit that the bus metropolitan area does because we're a congested area, we've got a certain kind of economy.

So there's a much higher proportion, much higher dependency on public transportation in a place like London, or a place like Boston, than there isn't a place like North Adams. So when you're going to the legislature saying, I need money to subsidize the MBTA, the legislator from a district that doesn't get much service says well, what are you going to give me? So why should I vote for this subsidy so people in Boston can ride more convenient transit at lower cost? You've got give me something.

So the political process imposes conditions on the process of subsidy that exacts a premium on top of what Baumol would have predicted. Baumol's analysis was that it's all about competition for labor. And you're going to be forced to pay the prevailing wage in that metropolitan area in order to attract labor, because there are competing opportunities for workers to work. Let's assume it's full employment, possibly it's because of the leverage in the workplace of the union.

But you're going to have to pay that metropolitan area competitive wage. But what Baumol isn't calculating is that the very process of getting subsidy out of the political process imposes these extra costs. So this is all me rambling theory. So a couple of years--

AUDIENCE: Pure-hearted politicians.

FREDERICK SALVUCCI: Yes. Even with good politicians that are really trying to do the right thing, they want to support transit. They have to convince voters in other parts of the state that don't have much transit to put money into it. They've got to do something different. I mean, in Massachusetts for a long time what Western Mass was getting out of the state government was the University of Massachusetts payroll. Because UMass was located out Amherst, there were jobs. It was a

very important part of the economy that's not very robust.

There were heavy subsidies to higher public education. Eastern Mass, in an earlier period, was much more dominated by private universities. Now there's a UMass Boston. But in an early period was really all concentrated out there. So the rough trade was, OK you got the T, I got UMass.

But there is some price attached by the political process to providing subsidy. Because in the more unevenly spread the service is, the higher that price is going to be. That's me making up theory and asking you to believe it.

So a couple of years ago, a couple of times in the past few decades, I've been lucky enough to have a lot of very smart students doing their masters degrees. So I've inflicted Baumol's disease on a couple of them. So [INAUDIBLE], I'm going to mangle his name, [INAUDIBLE]. Have you guys read his work at all?

He is a brilliant guy from Jordan. Very interesting fellow. He did a really nice piece on Baumol's disease, and somewhat theoretical piece. And showed, yes, it looks like transit really has it. Then a couple of years ago, there was another student named Javier. I think some of you knew Javier.

So he got-- he did an analysis where he looked at a large dataset. I think he looked at something like 700 transit agencies. And he was just looking at bus services in the United States. And he found that the MBTA has Baumol's disease, number one. Number two, every bus provider in the United States has Baumol's disease. It's not unique to the T. We think the T is worse, it's actually not. It's a problem everywhere.

Number three, there is a premium above what Baumol would have predicted. Baumol would have predicted this metropolitan area comparable wage. But in fact transit wages are raising perversely, not only higher than inflation, but higher than the salaries of comparably skilled workers in the same metropolitan area.

And the only explanation I could figure out is the leverage of the legislative process. We've got two kinds of leverage, the leverage of the workers in the union bargaining position. But then you got the leverage of other legislators who insist on some additional price to be paid. But you've got labor also commanding power in the legislative process.

So now, if I'm running the T and I need to go to the legislature to get money, the theory is that I'm the boss and there's this sort of structure and these workers work for me. The fact is, the workers have way more power than I do in talking to the legislature, because the union has a lot of voters. And they're disciplined, and they can deliver that vote. And they can deliver workers, and they can deliver campaign contribution.

And I'm trying to peddle public policy, and transit is good for you, and you should do this. So I really need labor as an ally in getting the support of the legislature for the subsidy. And, perversely, labor figures that out and demands even more.

So sounds weird, but Javier's data shows this is absolutely the case. That there is a premium above and beyond what Baumol would have predicted. And it's all over the United States. Then he took another look. And we made up a couple of tests of what might an indicator be of the relative political strength of labor in a state or a local jurisdiction. So do any of you know what the right to work laws are? So what's a right to work law?

AUDIENCE: It's a law that [INAUDIBLE] they're laws that basically prevent a union from requiring employees in a given industry to join a union.

FREDERICK Yes. So the right wingers who don't like unions, that's all right wingers don't like unions.

SALVUCCI: They're very clever at making up names so it's called the right to work, because that sounds kind of nice. But it's also from if you're pro union, it means that the union has to convince workers to join the union. They collect dues. They have to-- it costs money to organize and develop an agenda, and lobby, et cetera

And if not everyone in the group has to join the union, then you've got a free rider problem where people can say, oh, I'm a libertarian, I don't believe in unions' bullshit. Well, they want you give back half of your pay. You're enjoying the benefits of having union representation, but you just don't want to pay your share. I'm giving the unions point of view obviously. So are the what--

AUDIENCE: I said or you're Ayn Rand.

FREDERICK Oh, OK. So anyway, you get-- so you get this situation where we hypothesized that-- right to work laws passed in a lot of states, and didn't pass in a lot of states. And they did not pass and states surprisingly, that have strong unions. And they did pass in the South and in places where they weren't, where there wasn't much political power on union side.

So we said, well, maybe that's a proxy for the political power of unions. So have Javier took the right to work states, separated them out from the states where union membership is a requirement. And lo and behold, yes there's a bigger premium on top of Baumol in the states that are more union culture. And the states that are more anti-union in culture, there's less of a premium being paid.

So it looks from the data like this guess as to what's going on is at least consistent with what the data says. Javier you added a couple of nice papers on it. So then the next question is, so what do you, what do you do about this?

AUDIENCE:

So is there anything else that's like the government when they give jobs wants to give good paying jobs? Is like a part of it. Not just how to get votes from the bus drivers themselves, but from other people. But the government's always trying to-- like this whole election was won on creating jobs. I know these are government jobs.

[INTERPOSING VOICES]

FREDERICK

Well for politicians who get their votes from workers, there's more of a desire to be a good

SALVUCCI:

employer. But it's actually inconvenient to have a subset of workers who are largely financed through subsidy, making higher wages, and with better health care and pension benefits than other workers who are paying the taxes. So it actually creates a division within the workers, that why the hell is this guy getting more than me. And I'm paying his salary.

And so it's not particularly convenient, even for a somewhat left-wing politician to want to pay higher pays, other than the fact that especially if they're from a district that has a lot of bus drivers, then they want to take care of that constituency. So there's the kind of client-based politics that drives some politicians in that direction. But a sort of general left leaning attitude wouldn't particularly argue to pay transit workers higher than teachers.

But transit workers make more money than teachers. So I mean it's a pretty weird situation. And you keep peeling away the onion saying what's really going on here. And it looks like A, Baumol's disease is a real problem. And B, there is this premium on top of Baumol's disease that comes out of the nature of the political process, and the extra bargaining that labor has.

So labor has bargaining of the normal kind that a union always has with an employer, because they control the supply of labor. But then it has this political dimension. So once the enterprise becomes dependent on political support for subsidy, labor now has to bite of the apple. And I

think it makes sense as a theory. Looks like the data supported it from Javier's research. Yes?

AUDIENCE:

So transport [INAUDIBLE] teachers [INAUDIBLE] at least to what Scott said about the fact that transit the TFL goes on strike, then the London economy loses a billion a day. When transit agencies, when their labor goes on strike, the economic pain that they create is immediate versus teachers. If our kids aren't being educated, then the impact we'll be seeing only 10 to 20 years down the line. So with transit the economic pain is they have more [INAUDIBLE]. It's not, its leverage and its immediate economic impact.

That's why the unions exist [INAUDIBLE]. So that's why transit [INAUDIBLE] if transit workers go on strike, but you don't go on strike in the summer when people can walk to work. And let's face it, [INAUDIBLE] go on strike in the winter when the weather [INAUDIBLE]. The same reason that garbage men go on strike in the summer, is because if they go on strike in the winter, the garbage piles up, and freezes, and no one smells it. But if they go on strike in the summer, they use that kind of logic. It's the same kind of leverage. It has more of an immediate effect.

FREDERICK

So [INAUDIBLE] was also advising out here on his thesis and on the papers that he wrote on this. So [INAUDIBLE] said well, let's take a look at whether-- I mean one way to try to counter Baumol disease would be to become more productive. After all, this disease comes because of a lack of productivity growth. Shouldn't we look at improving productivity first?

SALVUCCI:

Is transit performing at the efficiency frontier in the way they're employing their resources. So a bunch of more analysis is done. And, of course, transit isn't operating anywhere near its efficiency. So it's a question. It's important to look at it.

And as managers, if you end up as managers in transit systems, you certainly have to pay a lot of attention to looking for ways to produce better quality public transportation at lower cost. I believe that it's more fruitful to look to get better quality for similar cost.

The current management to the T thinks that it's a victory to give you the same crappy service, but spend less money doing it. I don't think that's all that good. The objective is not to reduce costs. The objective is to improve what you're offering people, I think. If you want your product to be prized, and still around in 10 years, as opposed to just being a temporary Band-Aid. But there are different philosophies of management.

But in either case, whether you're looking at a cost reduction type strategy, or whether you're

looking at a value maximization, productivity and efficiency are important things to look to. So that's such one kind of thing you should be involved in all the time.

And you could also think about what are the external factors that might lead transit to become more valuable over time. Even if you're not being particularly more efficient in the way you're delivering it. So if the metropolitan area is growing, and if transit is also growing, then the cost per rider or the subsidy provider should go down. Because you've got less empty seats, that's the nice version. You've got more crowded buses, the not so nice version.

But you can get more service, if you don't look too hard at the quality of that service, at lower cost as the system gets more and more customers. So growth in passengers is certainly benign.

Now too much of a good thing is a bad thing. You get the kind of crowding you're studying in Chicago. That doesn't seem quite efficient when people can't get on, and are being left behind, and everything else. But from the point of view of the green eyeshade guys, that are just looking at the numbers, the more people you cram onto the vehicles that's dampening down the subsidy a bit.

So even with no particular management, effort, or skill, if the region happens to be growing, and if transit ridership happens to be growing, then the value of the transit is growing. And that can offset the Baumol's problem to some degree. And if you think of what the competing mode is. If the area is growing and the jobs are growing, and the congestion on the roadways are growing, conditions that certainly apply here and in Chicago. Then the societal value of the transit is higher, both for the riders because their alternative choice is to be in the congestion. And for the drivers who don't use transit who are in the congested conditions who are happy to have some people out of their way.

So through no virtue of the transit manager, if the regions are growing and ridership is growing, that can help offset the Baumol's disease. Both in the practical sense of getting more revenue, and in the theoretical sense that the value of the transit collective product is actually going up, through no virtue of your own.

AUDIENCE:

So [INAUDIBLE] they're growing about 100,000 people a year. I'm just wondering whether when that's happening, when they're not opening any new tube lines essentially, there's one, well one big line coming in soon. But they're not any new lines lines. Everything's getting more and more crowded. It's actually hard to get on. Almost there's a way to-- and it's not politically

very good way to raise taxes, especially during peak [INAUDIBLE] things like that, to actually allow people to get on. And then you almost have reverse Baumol's disease because the value has gotten so high. And the alternatives are [INAUDIBLE] in the tube ride.

FREDERICK SALVUCCI: Yes. So it would have to be pretty extreme to actually totally offset the Baumol problem. But it's certainly an offset. And that's-- none of you guys are going to rat me out, are you? This thing is being taped isn't it?

AUDIENCE: Maybe an eighth of us. [INAUDIBLE]

FREDERICK SALVUCCI: Well, we've got our visitors from TFL coming tomorrow. And they they're great people. And it's a very competent organization. And they're very proud of themselves for running a good service. And they, in fact, for a long time were able to persuade two different mayors. One, the labor mayor red Ken Livingstone the Trotskyite, and then the right wing conservative mayor Boris. And they were able to convince the Trotskyite, as well as the conservative that it was OK to try to increase transit fares by the rate of inflation plus 1%.

That's a pretty steep, especially for a labor kind of mayor. The current mayor is a socialist, and he's not into seeing that continue. And I don't blame him. But TFL was really happy that they had this strategy. And of course they argued that well, we're providing better service. So people should pay for that better service. And to some degree that's true. And their numbers were looking very good.

But it turned out that the population of London had grown in the previous five years, more than anyone knew. So there was a secret assist to the numbers coming out of the fact that the population had just grown, along with a growing economy. And not to take anything away from a very competent bunch of people running TFL, they were in the right place at the right time. You bunt on third base and think you hit a triple. Here we are.

You're in London with this terrific system, and the economy is growing, and it's kind of going up. Now it's a little unfair because they are very competent, and they're doing a good job, and they work hard at it. But a lot of it is just luck of being in the right place at the right time.

So there's an external extra benefit to transit that can help offset Baumol's disease in those cities that are growing. So what do you do in a city that's not growing? What do you do in North Adams? What do you do when General Electric pulls out a Pittsfield yanking 5,000 jobs with them? You know you don't have that luck in those situations. So it's nice to be lucky, but

you can't bank on that in a systematic way. And you need to be able to sort of look at the situation and think that through.

So another place you might get funding support, and this is very hard to do, and they successfully did this to some degree in London. Is to try to secure funding support, at least political support, from those growth constituencies. So the easy thing to do, not easy, all of this is tough. But the relatively feasible thing to do is to identify the beneficiaries of what you're doing, above and beyond those people riding on the system.

So you look at what's going on. And you say, hey, there's a much real estate developers making a lot of money. And they couldn't develop those densities except for transit. So let me go to them and try to get them to politically support taxes that someone else will pay so that there can be better transit. That's the easier lift, right? Let's increase the sales tax.

Real estate developers don't pay particularly more sales tax than other people do. Everybody tries to do things with other people's money. So I can make a campaign contribution, raise the sales tax, have a better transit system, my real estate value goes up, I make money. That's one proposition. That doesn't happen automatically. It's hard to do, but it's doable.

A more significant, more significant achievement was what transport for London pulled off on the funding of Crossrail. Because they went to the financial services community that really wanted Crossrail because they see-- they've learned a little bit from the experience that when Docklands light rail got built, all of a sudden these Docklands that were kind of abandoned start to be successful, and too successful, and hard to get to.

And then they do the Jubilee line, and another growth spurt, and wow. The economy's growing, this is good. Now let's do Crossrail. We're going to really get a massive amount of additional crosstown capacity, very large investment.

It's two big digs. It's like we use the Big Dig as a unit of measurement, that's about \$25 billion, I think it's \$25 billion pounds. Does that sound right?

AUDIENCE: I just know it's a lot.

FREDERICK SALVUCCI: It's a big, big deal. So how are you going to fund that thing? Well, let's go to the national governments and say hey, give us some money. This is virtuous. Here's our benefit cost analysis. Look how wonderful it is. And the national government say, get out of here. We've got a political problem, too much going to London. Lots of parts of the UK that aren't so

successful. They're not very sympathetic, so forget about it.

What they end up at the end of the story without going through the various attempts, is they convinced-- they put together a package that has three components. One, they pledged to defray a third of the costs of Crossrail by continually increasing transit revenues. That can be through more riders, or it can be the same riders at higher fares, or a combination of the two.

But a third of the capital cost is going to come out of the riders because they're going to be beneficiaries of less crowded conditions, and more convenient service. A third of it will get from the government. And a third of it we're going to put a surcharge on the real estate tax of large companies in London, on the commercial real estate. Not the little corner store, but anything bigger than some minimum.

Now that's a hard ask. Because now you're saying to someone, admit it, you're a beneficiary, and you should be willing to actually put some of your money on the table. And they're never going to agree with you because of the ethical argument. It's the practical argument look, we can ask for 100 percent national money all we want, they're never going to do it. We've got to have something different.

So they put together this a third, a third, a third package and they succeeded. Now, the national government is the most fraudulent of the three parties. Because if you think of the, and this was true with the alleged labor government then even more true with the conservatives. What's the marginal rate of income taxation in the UK right now?

AUDIENCE: Well it depends on what bracket you're in, but the highest bracket is 45% above 150,000 pounds.

FREDERICK OK, and what if you're say 80,000, 50,000 pounds?

SALVUCCI:

AUDIENCE: You pay like a marginal rate of like 30%.

FREDERICK OK 30%. So [INTERPOSING VOICES] Yeah so 30%. So we're going to build Crossrail. This is an unusual burst of construction activity. We're going to import a bunch of Polish workers to do the work. They're going to leave their wives and kids back home in Poland, getting educated back there. They're going to live on marginal conditions where they are, and the national governments taking 30% off the top of what they make. Maybe more than 30%.

So this one third that the national government contributed, they're getting it all back from what they're taking out of that blip in employment that the project is causing. So they're the most fraudulent of the three. They're not really contributing, but boy they made them crawl through a sewer pipe to get the money.

But the point is, you need to identify who the beneficiaries are. And, at the very least, you need to enlist their support to get someone else to pay taxes. And you may not get away with that. So you may have to do something to make the constituency that benefits put some of their own money on the table.

And the analog on that in Boston would be, it's very nice to get federal and state money to upgrade transit services. But that's state money is coming out of parts of the state that are much less affluent. So why shouldn't Boston and Cambridge and Somerville put some money into both the operation and maintenance of the service.

Seems to me, there's an ethical argument that they ought to. And there's a stronger political argument that they better, because the rest of the state's not going to pay for Boston anymore. Boston's doing too well economically to expect sympathy from the rest of the state on paying for the investment in the services that the Boston economy requires.

So the point is, if you're trying to deal with the Baumol problem, and you are, you can be lucky and that's nice. And you should at least recognize that you're being lucky. But then you also have to say who are the beneficiaries?

If I make up this fancy externality argument that it's good for society for there to be more transit, there must be some real human beings in back of that external benefit. I better figure out who they are. And at the very least, get them to support me politically, and preferably even willing to put some of their own money on the table. So it's kind of a thought process to go through.

Another strategy that is often, maybe to greater degree described as a panacea, and that is well, let's contract out. These unions are, not to be pejorative, they're just too good at what they do. It's not that they are nasty people. That they've got leverage, and they're using it. They think that's their job. They're getting more wages and benefits for their employees. So why would you be surprised. But you're having a real problem. So if you contract out, maybe you won't pay as much of a Baumol premium.

Now, deconstruct what I just said. Do you buy that? What if we contracted out all the bus service for the T to third party? So Paul Revere could run everything.

AUDIENCE: [INAUDIBLE] So you'd have to bribe them somehow. You can't have-- you couldn't have one private service when the whole thing, because they'd just unionized to the private service. Unless there was some kind of right to work law that was passed [INAUDIBLE] in Massachusetts. So you'd have to like contract it out to 30 agencies. And they would also all have to have a different union [INAUDIBLE] random. Rather than all joining some one Transit Workers Union. I don't think there's any, now thinking it out, any way you could force them to do that.

FREDERICK So you're saying if you can't do that it's of no value to contract out?

SALVUCCI:

AUDIENCE: I don't think it's of no value, but I think it's of marginal value.

FREDERICK Anybody want to argue? You got a little more than that out of it?

SALVUCCI:

AUDIENCE: I think I know we're going. But still hopefully this is [INAUDIBLE] that you can sort of by contracting some of it out, you can have a check on the power of the unions. And sort of what you're saying is that you can have sort of two systems that keep each other in line with one system [INAUDIBLE].

I guess the problem, like the problem with unions is they're often not necessarily based on the company you work for. They're often based on a type of trade. So you could end up having two companies that run bus services, but actually they all destroy the bus [INAUDIBLE]

And it's quite possible that in the short-term you might have more competition than longer-term [INAUDIBLE] basically [INAUDIBLE]

FREDERICK So is this competition you're trying to get, is this all competition among rival workers?

SALVUCCI:

AUDIENCE: No. [INAUDIBLE] between [INAUDIBLE] work [INAUDIBLE]

FREDERICK Yes. The companies are going to make profit on this. So it's not just the employees. It's also the private companies. So Javier runs the numbers. And looks at well, let's see there are a

bunch of places in the United States that do contract out for service. And let's see if services that are contracted out cost less. Now, before I tell you what he found, what would you expect to find?

A, how many of you think you would expect to find that it costs less to contract out than to do it all in-house?

AUDIENCE: Is this across all state the same labor law?

FREDERICK Do you-- all states. And we're just talking buses. We're not confusing it with rail, which is every city is a little bit different. It's just bus drivers.

AUDIENCE: I'll go with [INAUDIBLE]. Cost less.

FREDERICK Costs less. Anybody disagree?

SALVUCCI:

AUDIENCE: Yeah, I think it has more. I think it probably costs way more.

FREDERICK Cost more to contract out? That's interesting. Why?

SALVUCCI:

AUDIENCE: Because once you contract it out, you have-- you don't want to bring it back in-house. And potentially in a lot of these markets you don't actually have competition. You have one player. So that one player you'd be subsidizing more, potentially pay more rent to the employer rather than the employees. Because that one employer has a lot of leverage over you to drive up the amount you get paid overtime.

FREDERICK Yes. So that's very insightful. And that's fairly accurate. What the data shows that Javier pulled together is that contracting out does reduce cost somewhat. But that in comparison to places that provide all bus service with in-house employees. But that the cost performance is consistently better in those places that do a combination of contracting out and in-house.

And that's probably partly because once the contractors figure out you don't know how to do it yourself anymore. They get you over a barrel. And they take advantage of the leverage. And it's partly because you can't manage something if you don't know how to do it yourself.

So when you're contracting out, the transit manager has to know how to manage that contract. And if you're not doing anything in-house that's a weakness. So that indicates that the mixed

strategy seems better than all of one or all of the other. But if you had to choose, you might choose for the contracted model based on the way the numbers look. But the half and half or the part that, some of each, seems to be a better strategy.

AUDIENCE: Is it also the case that maybe some services are going to be run more efficiently by contractors, whereas some services can be run more efficiently in-house? Plus it makes sense to contract out when those services that can be done more efficiently that way.

FREDERICK SALVUCCI: It's possible, but I don't think so. I mean a bad, and unscrupulous manager, or a set of unscrupulous employees could, for example, look at a bus route that is not very full. But there's a policy headway that says well even if the bus isn't full we should not provide less than a bus every 15 minutes in this corridor. An unscrupulous manager or an unscrupulous union might say, all these people will fit in a bus every 30 minutes, screw it. We're just going to run half the service.

And if they don't get caught they'll pocket the money if it's a contractor. And if it's the workers, they'll just play cards and not run half the routes. In Puerto Rico when we were doing work there the story was, I don't know if you have verified. Discovery was one for me, one for the company. The schedule says there's a bus every 15 minutes, we run one every 30 minutes. That's good enough, and we play dominoes in between. Have you heard the story?

AUDIENCE: Well when I consulted for them and with [INAUDIBLE] that was the case [INAUDIBLE] The reality is that they didn't have the buses to operate, no buses in good condition. So they only had half the fleet. So we couldn't pull out [INAUDIBLE] So it ended up being what you said. [INAUDIBLE]

FREDERICK SALVUCCI: So anyway what I'm saying, though, is that you could view it as a kind of corrupt practice by a contractor. Or you could view it as an unethical practice by workers. But there's leverage in a market where policy wants a better level of service than the service requires in market terms. There aren't enough people paying fares. Because you lose some riders when you mistreat your riders that way.

But if your fares are low, and you're mostly dependent on subsidy, then your customer, if you will, whether you are employees or whether you're a company, your customer is the agency paying you with subsidy. Your customer is not the rider who's paying a fare to get a service. So you've changed the dynamic of who your institution is trying to please in its behavior. And workers aren't particularly better than companies in exploiting situations like that. It happens

both ways.

So the theory is that you won't get the benefits unless there is competition among different companies. If you go to private contracting. Even if you only do partial contracting. You look at the data and say well, I'm not going to make that mistake. I'm going to do some. You still would like to have multiple companies.

Well, in some areas there aren't multiple companies. You can't just will them into existence. And if your objective in the competition is to minimize the amount you're paying in subsidy, you may make this such a marginal business that it's quite unattractive for people to come into it. So if you've got a strategy to control Baumol's disease based on contracting out, you can't be excessively cost conscious or you will destroy the incentive for people to be part of it.

So you've got to think about why you're doing it. Now, if you're doing it to improve the quality of the service, and to provide more service, then you may be able to have a growing business opportunity. So that more companies will want to come into the area because it looks like a good place to do business. But if it's a kind of stable, 10 years from now is the same number of riders is today, it's a pretty dead end business.

So you're not going to really get top managers trying to provide better service for less money, either in the public sector or when you contract out. But there's a more fundamental theoretical thing. And I'm going on too long about Baumol.

But what's the maximum you would expect to get out of a strategy of contracting out and getting competition? Would you totally offset the Baumol's disease?

AUDIENCE: Just delay.

FREDERICK SALVUCCI: So why are you saying no, Leo?

SALVUCCI:

AUDIENCE: Because [INAUDIBLE] People [INAUDIBLE] That's the way I feel [INAUDIBLE] actually brings a lot of the fighting between the two parties. You have to realize that they don't [INAUDIBLE].

FREDERICK SALVUCCI: There's some of that but there's a more fundamental issue. The theory that Baumol put forward is that in order to attract labor you're going to have to pay the prevailing wage in the metropolitan area. And therefore, you are stuck with costs to grow faster than the rate of inflation. You can have all the competition in the world. It's not going to change the prevailing

wage in a Baumol disease industry.

You are going to have to pay the Baumol premium that Baumol identified. What you may escape is the premium on top of Baumol that Javier identified, which is coming out of the political leverage. As opposed to the workplace leverage that unions and contractors have in the legislature on affecting the-- So you shouldn't, theoretically, expect no matter how skillful you are with contracting out, no matter how much competition you get, you will still need to pay something like the prevailing wage or you won't have workers.

If you pay too little, you'll get workers with very bad habits, who don't show up on Monday because they went drinking over the weekend. And you start providing a lousy service. So you are stuck with the problem that Baumol identified. What you may reduce is the premium on top of that that comes from the political complication, the political power of labor, and companies in the legislative process that is providing the subsidy, which is essential to deal with it.

The first practical question for Baumol's disease industry is where are you going to get the money? You need the subsidy. And then the process for getting it has these other complications. Yes?

AUDIENCE:

So basically you're saying it's the government themselves that pay the subsidy to the contractor to induce them to participate in the market? Because basically the private companies aren't subject to Baumol's disease because they wouldn't take the contractor to do the business, unless the government pays them [INAUDIBLE] counteract Baumol's disease.

**FREDERICK
SALVUCCI:**

Right. So even if there's lots of competition, and there are 10 different companies, they're not going to bid below what it's going to cost them to offer the service. They're going to have to pay the prevailing wage. So don't be surprised over a decade when you see that that's gone up faster than the rate of inflation.

If you should define success as being, if you would maintain that growth at or below the rate of inflation, in the prevailing wage, then you're doing something right. Now, if simultaneously the region is growing, so are these external benefits. And you're able to actually charge more for the service as they have been at transport for London, then you may actually begin to offset even that part of the problem that Baumol identified.

But the point is that contracting out is an interesting strategy, but it's not a panacea. It's unlikely to get you below the Baumol threshold, so to speak. But it may get you-- it may help

you reduce this premium that you'd otherwise be condemned to pay. So this diagram is just a way of saying once you're running a business subsidized, your organization chart is really complicated.

I mean in Massachusetts you've got a governor, the Secretary of Transportation serves at the pleasure of the governor. There's a board of directors. There's a general manager. In some, just within Massachusetts, there have been times when the general managers served at the pleasure of the governor. There have been other times when the general managers at a contract from the board.

So if you've got a situation where there's a secretary, a board, and the general manager, now who's the boss? Is that the secretary? Is it the board?

That general manager then has to manage this production system. Has to worry about customers. Has to worry about fares. But he's got to deal with labor. Needs support for the taxes. Who controls that? Congress, the legislature?

Labor has more access to those sources of power than the management structure does. The governor who's supposed to be on top of all of this, he may be from a different party than the legislature. Legislature may not even like the guy, so he's not much use.

What's going to get you votes in the legislature for some law that's going to help you run a better transit system? It might be capital to buy new buses. Might be just the operating subsidy. Labor's a big piece of this. So you've got to recognize the kind of power and influence they're going to have.

So let's talk about the history of the labor movement. Talked last time a little bit about the commons union, the eight hour day. What's the story with immigrants and labor? We all holding hands, singing solidarity forever, American-born immigrants all loving each other?

AUDIENCE: Immigrants always get the scraps of work.

FREDERICK SALVUCCI: Yes, immigrants are the last ones in. So whoever is the earlier group tends to dominate the jobs. Tend to dominate the management structure. Tends to dominate the power positions within the union. So there's not this-- there's not real solidarity within the union. You get factions within the union. And the newest immigrants are usually underrepresented, sometimes dramatically so by the union.

We had a situation at the T, where through a fluke we were able to hire part-time workers. This piece of legislation went through. And the pay scale for the part-time workers without it was outrageously low, and did not include health care benefits.

Well, I was really offended. I said, we're a public agency. We're treating these people horribly. And we don't want them to hate us. I would hate us if I had to work these hours without a decent pay, without health care benefits. Let's at least pay health care benefits.

Union says no, you can't do that. You can't confer a benefit except through the bargaining process. Oh, well surely you agree that your dues paying members should have health care benefits. Nope, we don't care.

You're taking their dues. You're supposed to represent them. Nope. You're going to have to give us something if you want us to allow you to pay benefits to those part-time employees. I mean you'd like to strangle them, but there are rules to bargaining, and so [INAUDIBLE] that are all about leverage, and very little about public policy.

And your first expectation about how people will behave is very often not the case. There are these sort of perverse incentives. And the first preoccupation on the Union side is usually to get re-elected. And the more democratic the union-- do you think democratic unions are better than autocratic unions? How many people vote for democratic unions?

AUDIENCE: Can you explain the difference?

FREDERICK SALVUCCI: Democratic union is one where there are elections every couple of years. And often the president of the Union loses, and a new president comes in. And there's a real give and take and debate. So in the autocratic union there's a family that's been the president and business agent for the past 25 years. And when the old man gets old, his nephew gets the job. So you got both kinds of unions around here. Which one do you think is preferable?

AUDIENCE: [INAUDIBLE] better for the workers or profit [INAUDIBLE]

FREDERICK SALVUCCI: Well, either. Take it separately. Better for the workers.

AUDIENCE: Just because you're asking the question I'm going to go with autocrat.

I think it's a tie.

FREDERICK

SALVUCCI:

Yes, well the democratic union-- the union is-- the union leader is so afraid he'll lose the next election, he won't make any decisions. So we, at one point, had hired smart people like John Attanucci to figure out better ways of producing stuff. And they run these numbers and say, hey, we can structure the work for the rail side into four 10 hour days, a 40 hour week.

People will get long weekends. We can make the numbers work. It'll save us money, and the employees will make the same money and have three day weekends. And they sort of test it with people, and the workers really like this idea.

Union wouldn't accept it, because they were afraid that it would become an issue. So you couldn't even give them something that you knew the workers wanted because they were so weak. They were afraid to make a deal.

You get a more autocratic union, and there are some not so nice things about the autocrats, but they're willing to make a deal. They know they're going to be president next year. They've got enough confidence they're going to get reelected, that they're better able to step back and say, well, what's the long view here. And they may be exercising that power, on a good day, they're exercising that power on behalf of the workers. But they're not so hypersensitive to a faction that they're unwilling to make a deal.

In the dynamic of the union, the union is just like any other organization. The people who count are the people who show up. So you have a union meeting once a month, who shows up? A small subset of people. Everybody else-- Everyone else is out bowling or watching television, or doing whatever they like to do. They don't go to union meetings.

So you got to take care of the ones who show up at the meetings, because that's the attentive public. They're the ones that are paying attention. So the dynamic within the union may appear to be democratic, but it's also dominated by small factions whose interests may diverge from that of the larger group. And especially if there has been a period of ethnic change.

Typically, the dominant group in the union reflects the ethnic composition of 25 years ago. And the smarter ones realize that they better pay attention to the new workers, or they're going to lose their positions more quickly. But the nastier ones just say, the hell with it. I'm going to take care of my people, and I don't care about them. So democracy is a mixed blessing sometimes. But it always makes it interesting and complicated.

Go to Item H because we're running out of time here. World War II labor shortages, wage and price control. Do any of you know the story of the World War II wage and price controls? What was going on then?

AUDIENCE: Wages were frozen. Yes. So consumption of products was also frozen.

FREDERICK Yes, because the government was--

SALVUCCI:

AUDIENCE: [INAUDIBLE] war.

FREDERICK Yes, and the government was afraid of, that the shortages would lead to price spikes, and
SALVUCCI: there'd a huge political backlash. So they put in wage and price controls. So the industries that were producing, particularly for the war effort, because that's where there was a lot of money to be made, needed to attract workers. But they couldn't offer higher wages under the rules. They started offering health care benefits. It was the only way they could compete.

At the end of the war, some of the socialist labor leaders, Walter Reuther and others, looking at what was going on in Europe said, well, this is a stupid way to fund health care. Let's have health care for everybody, and let's do it in an across the board way. And the big businesses said no, we like it this way, because this gives us an advantage that our workers are getting health benefits, and the other aren't. And that's to our benefit.

So these bastards who yap about out-of-control health care costs, the reason we've got this backward system we've got is because of their greed, and their unwillingness in the post-world War II environment, when you really could have gotten a much broader base Medicare for all kind of approach. They didn't want it that way. Now they complain that they're paying.

And I don't blame them for complaining. The system now, it's kind of weird. But it was a product of the peculiar politics of that point in time. And you also do get, theoretically, it's possible that labor unions might like the idea that only union members get health care benefits. And that they're not conferred on the whole population, because it's another reason to join the union.

Fortunately the unions aren't that narrow. And they tend to be a little bit more progressive. But they're acting against their own interests, in a sense. It does confer some advantage on them if health care has to be bargained for. It's a reason to join a union, and be active in the union. So you get all these perverse incentives that come out of this kind of stuff.

We talked about right to work a little bit. So item C, ridership growth is never instantaneous. The point that [INAUDIBLE] made earlier in the class. A lot of important things take time to achieve. You don't instantaneously get a benefit. If you provide more service, and you guessed right, maybe there'll be a ridership growth in the area that you're providing more service. But it doesn't happen the day you start.

It's going to take time to build. And that time period, and the lag with which-- even if you get really well and a lot of riders come, and you generate a lot more revenue, that revenue is going to come later than the cost that you have to expend early on. So you get this sort of swerve in your pattern.

Now, this is a couple of years old, but unfortunately it's still true. There's this sort of nasty attitude that well, we've got to grind down costs. We've got to grind down costs. We've got to grind on costs. But the only reason we have a transit system here is it actually happens to be important to the economy. And we're lucky that the economy's growing. We actually need more service.

So to me, it's more important to provide more service than it is to grind down the cost of the service. If the only thing you're doing is quote "saving money," then shut the system down and save all the money. Presumably, you're around because you're providing something of value. And you ought to be providing higher value, and more of it, up to some reasonable limit. But certainly I don't think anyone who rides the T would argue we've reached the level where there's too much service out there. We've got a long way to go in improving service to get anywhere near to such a danger.

This brings me back to this question of contracting out. Because to me, most of the discussion about contracting out, if you're reading the Boston papers, is about, oh we'll contract out and we'll save money. And labor costs too much, and blah, blah, blah.

In the first place, you're not going to save much money. The workers-- Paul Revere, the company that runs the blue M2 bus that you see on Mass Avenue, they're also a union operation. They've got the Teamsters Union. They provide health care benefits. They pay decently.

It's not about-- a good, private contracting scheme in my view, is not about paying workers less. It's about providing a better service. How many of you use the number one bus? And are

any of you able to use the M2 shuttle? OK, which one comes first usually?

AUDIENCE: M2, the one depending on the day.

FREDERICK Which one-- which one are you more likely to find a seat on?

SALVUCCI:

AUDIENCE: M2.

FREDERICK The M2 is a better service. That's what you could get. That's not because the T is inherently inferior. There is not enough service on that line. But Paul Revere runs a reasonable service because, if they don't, they won't get chosen next time. There is some competition, not just for cost, but for quality. And to me, you want to be in that area.

SALVUCCI:

And the other issue is if you want to increase service, and you talk to the MBTA, you go to a meeting and say the service is lousy. We want more bus service on the number one bus. And the answer is, fine what service would you suggest we cut so we can reroute those buses onto the number one? We'll cut the baloney, that's crazy.

Those other routes need the service too. They're in this sum zero game where they refuse to add service except by taking away. Consequently they never add service. And they said, well, it's a tough world. We only get so much equipment. We only got so much drivers. We only have so many maintenance facilities, land of 1,000 excuses. We can't expand.

You want more service, contract for it. Put some money on the table. Have a bid, work and get some competition so it isn't just Paul Revere. You'll get more service a hell of a lot faster than you will ever get it out of the public sector machine. So I think there's a pro rider argument for contracting out that I believe is quite valid. But no one makes that.

You have this kind of contest between the anti-cost, grind down workers, it's a victory if we pay people less. And the union that says, do everything in-house. Neither of those parties is really speaking on behalf of the riding public. So you want to think about those aspects.

Usually people talk about the union relationship as bargaining for-- union wants higher wages. Management wants lower wages, et cetera, et cetera. Bargaining takes place periodically. You might have a two year contract, you might have a three year contract. You set the terms in wages and working conditions for that period. Then you bargain again.

If you can't reach agreement, there are procedures for binding arbitration. Why do we have binding arbitration? Why don't we just have a strike? You know?

AUDIENCE: Why do we find [INAUDIBLE]

FREDERICK SALVUCCI: Yes. At the MBTA we have binding arbitration. It's not the case in every transit agency in the country. In Philadelphia if they can't reach agreement, there's a strike.

AUDIENCE: They put it in state law.

FREDERICK SALVUCCI: Yes, why was it put into the state law?

AUDIENCE: To avoid strike.

FREDERICK SALVUCCI: Yes. So in Massachusetts the thing was, wait a minute, strikes are really painful for everybody.

Let's just have a bureaucratic process to settle disputes that can't be resolved, but let's not have a strike. Too many people are hurt when you have a strike. The workers-- workers lose their health care benefits. I mean, your kid's got a kidney problem, and you have no health care, that's a problem.

So it's a problem for the worker to be on strike. It's not easy. It's a problem for the public, there's no service. So binding arbitration I think is a good idea. There are those who argue the Philadelphia system is better. I think it's wacky. They shut down the city every periodically.

AUDIENCE: They lose their health insurance when they go on strike?

FREDERICK SALVUCCI: Yes, if you're not employed anymore you lose the benefit.

AUDIENCE: But when you're on strike aren't you still employed?

FREDERICK SALVUCCI: Not if the contracts run out. I mean it's like, it's a bizarre world.

AUDIENCE: But in most [INAUDIBLE] is that going to be the issue, because if they have--

FREDERICK SALVUCCI: No. Yes, in other places you would have a more civilized way of dealing with it, because you didn't have this odd World War II.

[INTERPOSING VOICES]

AUDIENCE: The English have way more strikes than we do. Maybe that's because they're not [INAUDIBLE] health care when they go on strike.

FREDERICK That could be true. But they also-- I don't know if those are legal strikes or illegal strikes.

SALVUCCI: Because sometimes in Massachusetts even though we've got binding arbitration, and it's against the law to strike, occasionally they'll walk out. And it's very dramatic. You put the labor leaders in jail, and that gets them more votes next time, because it shows how committed they were to the cause. A lot of theater involved

But the only point is the drama is around the bargaining. And potential strike, wildcat strike, binding arbitration. And it's about how much money in the envelope. But at least as important as what's bargained explicitly, is the day to day relationship between management and labor between the bargaining, because you've got a job to do. You've got to run service. And there are these arcane rules.

And the rules are so arcane that if you comply with every rule, you can't run the service. Oh I'm not going to drive the bus because the windshield wiper is broken, and the rulebook says I can't drive it. But it's sunny out. It's not raining. We'll fix it tonight. Nope, I'm not going to drive the bus. It's not in perfect condition.

So there's always an informal relationship between the employer and the employee, or the management and the employee. And that day to day relationship is very critical to the quality of service you can provide. And the papers never talk about that aspect of the Labor-Management relationship. It's almost always about the bargaining, and how much is in the paycheck, and what the health care benefits are.

So you really need to think about the quote unquote "culture of the place," and what it's like to actually provide service in a union environment. And if you didn't have a union, you'd still have to solve the problem of how to get-- how to motivate your workers. So it's not-- the union is just giving you an articulated forum to deal with this issue, which can actually be kind of convenient.

If you don't have a union, you almost need to invent one because you need some basis to communicate with your workers about, OK, how we're going to get this thing done. So if you shift your focus from the paycheck bargaining aspect to the management of the production of

the work, I think you'll be looking at the more important problem.

And I'm out of time in two minutes. So let's see if there's anything else in here. Here, how many of you have seen this? OK so what is it?

AUDIENCE: They've been trying to do a few things. Trying to get a increase state income tax by a little bit, particularly on the rich. And they're trying to get some more money out than what the state provides in transit, education, and health care. Or in this case, in transit.

FREDERICK SALVUCCI: And so they're putting a lot of energy into this. And it's a direct-- the union has gained, in my view, a lot of leverage. Because the management at the MBTA has been so into we're going to privatize this to save money. We can do it cheaper by contracting it out. They never talk about we can improve service by contracting it out.

So they've totally, in my view, blown it because all they're doing is saying we can do it cheaper if we contract out. And they've left the playing field open to labor to pose as the champion of the riders. And say, oh we are friendly transit providers. Give us more money and you can have better service. Never dealing with the fact that the service production at the T is pretty bad.

And the Paul Revere, private companies, do a better job. They are closer to that efficiency frontier that [INAUDIBLE] was talking about of getting as much quality service as you can out of a given resource base. It's always possible to get less than you paid for. It's rare that you can get more than you paid for.

That discussion never happens that there's a reason for contracting out. Because we can grow faster, we can provide better service. So the playing field has been left totally open to labor who says management doesn't care about you. They don't care how crowded your bus is. They don't care how lousy the service is. They're just into being mean to labor.

I mean that's basically-- I think it's a really dumb strategy by the current management at the T. That's a very objective statement. And it's a minute late so, sorry to go on too long and thanks for being here.