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Practical Issues in Public Pension Design

Governance and Time (In)Consistency in Pension Policy

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Winkelmann: So, let's get started again. I think a couple of themes have come up in the first two presentations, and they are related to how we set the rules of the road on pensions. So what we're doing in this panel is talking about some experiences and how different systems and the U.S. systems have set the rules of the road for delivering on retirement income. So, to give it a slightly different flavor, it's how pension systems have set the rules to balance the interests of taxpayers versus beneficiaries, how to balance short-term versus long-term, you know, really basically how to align interests across all the constituents. So what I think I'm going do is ask each of the panelists to introduce themselves, talk a little bit about their experience in dealing with governance issues with the entities they've been involved in, and we'll start with Tim.

Mitchell: Right. Thanks, Kurt. Well, as Kurt mentioned earlier, I'm from New Zealand. Thanks for laying on the polar opposite weather to when you were down there 15 years ago. When I go to conferences, I almost always get the most-traveled-attendee award. That's just a virtue of being stuck far away in the South Pacific. My involvement with pension issues, I work as a consultant of pension funds and sovereign wealth funds. So my involvement is largely with the, sort of, governance at the pointy end of implementation of the savings institution. So whether it's pension fund or, in the case of New Zealand, the sovereign wealth fund, set up to help smooth the pension system out, that's pretty much where my focus is. And, of course, I get exposed to the debates around pension policy as a result of that, but, largely, my focus is on governance arrangements and institutional design.

A quick word about the New Zealand system, so New Zealand has a universal social security, it's called New Zealand Superannuation. No means tests. Age 65, everyone gets some residency requirement that you have to have been in the country for a certain number of years prior to retirement. And, of course, that is going be hit by the same demographic shock that is occurring around the world. Fifteen or 20 years ago, somewhere around that range, the Minister of Finance said, "Well, you know, we've got this big fiscal shock coming from aging demographics." And we know that the cost of providing the social security is going rise from about 3.5% of GDP to about 7% of GDP per annum.

And we know that that's not going be a smooth transition. It's going to rise very slowly, then there's going be this very sharp hump as the baby boomers move into retirement. And we can see all of this coming, so let's do something about it now. And the idea of changing the mix of the system design, raising the age, or means testing the benefit is all politically very toxic subjects, so his solution was, well, we should partially pre-fund the system so that it can smooth out the fiscal adjustment. We don't get rid of it, we just make it easier for successive governments, future governments to incrementally get used to the fiscal shock that is coming to us. A consequence of that was that the government set up a savings institution called the New Zealand Superannuation Fund, which would essentially take the extra taxes they were taking now, putting them aside to pay them out 20, 30, 40, 50 years into the future.

And where I really got involved with this...up to that point, I had spent a little bit of time in New Zealand treasury working on, sort of, institutional design issues around the government's financial institutions. But where I really got involved with this was when the New Zealand Super Fund was set up, I was there from day one and helped them as they built over the next decade or so. And so then, my focus has always, really, since then being on the, sort of, institutional design and how do you get the most benefit out of that to deliver on what the policy intention was.

Boyd: So, I'm Don Boyd. I guess most of my career has been spent studying the finances of state and local governments or participating in them. Early in my career, working as a legislative staffer, as a head of a group that negotiated parts of the budget in the executive branch, and then a few quasi-academic positions where we study the finances of state and local governments with a fair amount of quantitative analysis and model building. And I'm now partly located at the State University of New York. So, very early in my career, I had a lot of experience with a few groups of policymakers. And, actually, let me just back up and say when I think about, I guess, the word governance, to me, when it comes to pensions, maybe I would...I don't know if I would expand it, but how I would define it is to include the entire institutional environment which I think is flawed in many,

many ways. And that institutional environment includes financial reporting and the group that makes the rules of the road about financial reporting which is GASB, the Governmental Accounting Standards Board, the group that sets the standards for actuaries which is the Actuarial Standards Board, the groups who negotiate benefits using in part the information that's kind of promulgated under the standards of those two organizations, namely legislators, budget officers, CFOs, governors, and the law. The law is crucially important, statutes and especially constitutions.

So that, to me, those are the main elements of what I would call the institutional environment...oh, and excuse me, pension trustees, of course, and their actuaries and other aspects of their operations. So it's a very big institutional environment, and there are policymakers in all aspects of that, and I've had the chance to be a participant in some of those discussions early in my career, as I said, working on negotiating the budget in the State of New York. One, I think, very important takeaway from that experience is perhaps in the parlance of discounting is, you know, kind of the almost infinite discount rate of many policymakers in the short term. In a real world sense, you know, you talk about the world ending in 13 months. You're negotiating a budget the month before the end of the fiscal year for, let's say, the next 12 months, maybe the next 24 months in some states. Nothing that happens outside that window, almost nothing matters.

So when I was in New York, we...not me, personally, but folks encouraged a change in pension cost method that essentially freed up more than $800 million of cash which was a lot of money back in the 1980s, and, you know, it just meant that's what you benefited from over the next 12-month period essentially. Whatever consequences it had for the future were valued at almost zero. New York may be an extreme. There are certainly other states that are not as fiscally irresponsible, but many are. But I think that kind of...there's a lot to say about the importance of other aspects of the institutional environment that might constrain bad behavior. And as I think about a lot of the rules of the road, I really think about two things. One is bad incentives. And it's nice to correct bad incentives when you can, but if you can't, it's nice to have rules that might counter those incentives, although devising effective rules is really, really hard. So, anyway, my experience has been as a participant. The last thing I would say, more recently we did lots and lots of interviews with legislators, with budget officials, with actuaries and others about how you think about risk in a pension system. And I think one of the things we learned is it is extraordinarily hard to convey important conclusions in a meaningful way to...one of the things, one of the most important aspects of pensions that affects legislators and others... And I don't have a great solution. If we get into it later, I may have some comments, but it's just extraordinarily difficult to communicate this information effectively and yet extraordinarily important.

Lundbergh: Yes, Stefan Lundbergh. My experience is I'm a board member of one of the buffer funds in the Swedish pension system. I've been there for eight years. I'm kicked out this year because we have an eight-year rule. After your eighth year, you have to shift out, which I think is a great thing because you bring new blood into the system. What I noticed from a governance perspective in there as a trustee is that, number one, you're completely framed by your agenda that you have to discuss in the board meeting, which is typically not so relevant things. It's more like you need to follow up this new policy, that policy, that policy, and the real questions you need to discuss, they're very difficult to get on the agenda. So, I noticed, sort of, how do you really get the real questions and have them discussed in the board? That's really difficult because you become a slave under the framing of the agenda you're going to discuss.

Another thing I realized, when you want the organization to do a certain thing, it's a behavioral game theory problem rather than an investment problem. If I give someone these rules, how will they play the game? In pension land, if you tell someone, "This is the amount of risk. This is the interval you're allowed to be in," they are automatically going to do that because they don't want to be even close of getting near the boundary. So you know that. You say, "If I want this, I give them that mandate." So you have to think ahead. If you're talking to an investment banker, if you want them to have this mandate, you do that, right? Complete different animals. But you have to think in terms of, "If I do this rule, how will people react?"

My 10 minutes of fame was when I did the Swedish review on reforming the 401(k) system in the first pillar.

This was a horrible system design-wise. It was designed in the mid-'90s and they've never changed it since then. And they basically said, "Anyone who has a mutual fund that is registered under the UCITS regulatory framework in Europe can put it up." It doesn't matter, you know, who you are, just because you're a UCITS fund, you can upload it. So there was a lot of bad selling practices there. People created funds that were not so good and they would basically do hard-calling to individuals because everybody in Sweden is basically on the list. You just take the telephone book and start. So there was a sort of quite aggressive marketing there, and it ended up that one of these funds created a very intriguing solution where they basically were stealing money through a derivative position which they sold to themselves and was never marked to market. This turned out to be a big scandal. And that's the lesson number one, never waste a good crisis. So now, every politician in Sweden said, "We need to fix the system."

So the good news was that Richard Thaler, back then, he didn't get the Nobel Prize yet. So he wrote a book called "Nudge." In that book, he has one chapter on the Swedish system. "This is actually bad choice architecture." So I sent an email to him immediately that says, "Okay, you complain. Do you want do something about it?" So he said, "Yes, I'm in." And he came to Stockholm to do a presentation. The interesting part, half the politicians refused to come because they didn't want to hear it because it was against their beliefs. So what I learned in this process was I came up with a super simple solution. I basically said, "Dear politicians, you need to determine the goal of this component of the system. Secondly, you need to define what kind of choice architecture you're going to put people through, and if, you know, people go down and are going pick their own funds, you need to have someone who's sort of a sheriff making sure people don't get...sold snake oil." That's all I said. It's plain vanilla, nothing special.

The interesting part with this process was once it started to roll, in the beginning, people said, "No, Stefan. You're wrong." You know, "More choice is better," but, somehow, the public opinion started to shift. And because I used a very simple language and I explained it like, in America, in the Wild West, you know, if you have a lot of outlaws, well, that will, you know, make it difficult for good fund managers and good people to do good business. You need a sheriff to keep order there so you can actually vet things coming onto the platform so people don't get ripped off. You shouldn't get ripped off in the state pension. So with that kind of language, the sentiment of Sweden shifted. So it's almost reached a tipping point. And what I realized, what I did, probably the smartest I've done in this, was that I got the civil servants to think along with me. So it was as much their, sort of, review as it was mine. So when I'm...after 10 weeks, you do your review and you hand it in, there were people in the system who says, "This is what we want to do. This is what we should do." So, in that sense, I started it, but I handed over the baton to other people and it rolled on and on and on.

And one of the really good moments...you know, sometimes, you're more lucky than you deserve. One month after we handed the review in, Richard Thaler got the Nobel Prize. And in Sweden, that's a big shit, right? Sweden gives it out. So the politician says, like, you know, "This behavioral stuff, we give the Nobel Prize with this hand. We cannot say that everything is shit with this hand." So, with a bit of help Uncle Nobel, a proper crisis, and some clear communication, it was possible to create a tipping point that changed the system, and I found that so amazing. And it wasn't just me, it was, like, a lot of people, but once it start rolling, everybody jumps the bandwagon.

Winkelmann: Right. So, as I think about pensions, I think, Stefan, you talked about it earlier. I mean, okay, I claim no unique genius here. There's sort of a long-term problem for beneficiaries which is, "Okay, I want to have...I'm going to start setting money aside for a long horizon." And then there's all these agents, if you will, who are meant to help them do that. So if we think about politicians, we think about fund managers, we think about union leaders, and so on, and if I look at their incentive structures, they're not necessarily set for long horizon. So if you think about...and I'm posing it to everybody, I mean, how did people in your experiences get...how do you get a conversation going in terms of aligning short and long-term interests? So, in other words, the short-term interest of all the agents with the long-term interests of the beneficiaries.

Lundbergh: That's a really difficult question.

Winkelmann: That's why I asked it.

Lundbergh: The challenge for most people is you want to have a simple, predictable business model, right? You want to have annual revenues if you work in the financial sector, but long-term is about managing, how you say, complex, dominant, and basically, uncertainty. You don't know how the future is going to look. Now, this is really difficult to combine, and if you're a commercial organization, it's very difficult to step away from the annual revenue model. If you're something like the New Zealand Superannuation Fund or a state fund, you might have a possibility to become a bit more longer term, but then it's really important as a trustee that you don't allow the organization to set them up like an asset manager because all of a sudden, then you have this organization, it could be long-term, but if they start looking at alpha, beta, and managing the deviation from a standard portfolio, they become like an average asset manager, and then it's really difficult to be long-term.

Boyd: So from the perspective of U.S. public pensions defined benefits, I think, you know, there's so many problems, but one of the most significant problems is wrong information. So the misvaluation of liabilities, and I would argue, even more importantly, the misvaluation of annual service cost, the cost of pensions earned from a new year of service, it contributes to the notion that you can offer benefits seemingly far less expensively than they really are. So right at the start, in the process of negotiating benefits, whether it's done by a mayor and a city council in unions or whether it's done by statute, which is probably more common, it's a wink-wink game of these things, you know, are really a lot less expensive than you might think they are, because, in fact, so much of it's going to be paid by that great investment income in the future. So the misvaluation is a big problem. I don't think it's anywhere close to all of the problem.

I think that even if we had more proper information which would lead to better incentives in benefit creation, there is the funding problem, the fact that there's...I don't want to say misvaluation. You know, I think it's proper to make a conscious decision about how much you're going to earn on your portfolio. The problem is, right now, it's a huge incentive for risk-taking and pushing risk off to the future. I think there needs to be...well, first of all, severing the links so that it's not your own portfolio that determines the assumed rate of return, A, would be important, so reference to a market rate is important. But, second, I don't think...unless you counter bad incentives by constraining legislators through, for example, a discount rate, I think that, you know, those kinds of constraints would be very helpful toward, you know, kind of putting the U.S. pension plans on a better path. All of that requires more money and there's no getting around that.

Mitchell: I guess I come from a different perspective in the New Zealand model. And New Zealand, by no means, has got anything close to a sort of perfect institutional arrangement around its pension system, but I think, critically, for the New Zealand Super Fund or this intergenerational fund, a couple of things happened. One was, to the extent possible, the trusteeship, if you like, of the fund was depoliticized. So the trustees or, technically, the board members of the fund are appointed through this double-arm's-length process, so there's a independent nominating committee. The members of that nominating committee have bipartisan input into the composition of that committee. The committee is then charged with finding the right people to run the fund. Ultimately, the executive, the cabinet of the day make the decision, but they can only make that decision from the people recommended by the committee, so they can't say, you know, I want to appoint my mates Bob and Sally to be on this board because it's... And so I think that's really important, and it changes the way the institution behaves because the people who are there are not there beholden to a particular political constituency at the time. That was one part, and a corollary to that was a bipartisan recognition that you could disagree on the elements of, sort of, pension system design, but given the institution was in place, then respect the institution. So there was agreement, you know, that they would have their political debates around system design but leave the New Zealand Superannuation Fund institution out of that. You know, attack it if it deserved being attacked because they've done something stupid.

And, again, that created a sense within that institution that they could genuinely focus on the long-term and not be worried about three-year political cycles. And I think that the probably final thing I'd say just about that component is appointing expertise to that board. So the two parts of that, one is that the board members could only be appointed if they meet a certain skills requirement, and there's a statutory requirement for the institution to apply best practice. And, you know, the statutes are very silent on what best practice means, but the board figured out very early on that it means something, so they went out and talked to a lot of people and continue as, you know, sort of the DNA of the organization is always to be very outward-looking. And so what are people doing? How does best practice evolve rather than what I've seen subsequently in consulting to a lot of institutions, they're very inward-looking, focused on their own problems rather than seeing, you know, the experiences that others have gone through.

Winkelmann: So, Tim, I think we talked...well, 15 years ago. You said that a lot of the...some of the ideas in NZ Super came from what they put in place in CPPIB, the Canada Pension Plan. I mean, how would you compare and contrast to the extent that you've kept up with that?

Mitchell: Yeah. So, absolutely. The government legislation was very heavily modeled on CPPIB which predated New Zealand Super by, you know, a couple of years. So they were going through a similar policy development and legislative process. You know, it's sort of one after the other, as were a number of funds at the time. You know, Australia's Future Fund followed New Zealand's Super by three years. And so these institutions were learning design issues from each other. So then, you know, if you look at the key elements of the governance arrangements within CPPIB compared to New Zealand, they're very similar. So, independent board, arm's length, the idea that you build up this expert institution, that you have some degree of immunity from political to-ing and fro-ing day to day, that's all very important.

Winkelmann: So using the CPPIB, the Australian Future Fund, and NZ Super as a kind of reference point...I guess we could toss the Norwegian Pension Fund in there, too, because they've got a pretty strong arm's-length of relationship, right? So how did...? I mean, what's your impression of how people got, if you will, bipartisan support for setting up these kind of institutions? And I put that for everybody because you all know all of the institutions. So, whoever wants to go first. I'm going off-script, by the way.

Lundbergh: Okay. No problem.

Winkelmann: I thought you could handle it.

Lundbergh: In Sweden, they have the AP funds which is basically more or less the same as New Zealand and Canada Investment Plan. In Sweden, they struck an agreement between all the major political parties, so they say, "We don't want to have pension as an election issue." They had a big fight in the '60s which almost broke the Swedish political system because the left...your party affiliation did not predict how you thought about the pension solution. So they basically said, "We don't want to experience this again," so they said, "Let's take pension off the political agenda," the sort of four-year election cycle, "and strike an agreement. And if you want to change that agreement, everybody has to agree." So this is, you know, on the level of changing the constitution in Sweden. This is almost as difficult as that. So that means the organizations have a long-term approach. They don't have to worry about politicians. And, also, sometimes, a politician says, "Well, why don't you invest in the Swedish road," or this or that, but then sort of it's a lot of transparency around, so it's very difficult for the politician to push anything. So I think transparency is really good on things. Distance is really good. But, also, have a sort of long-term game plan so the organization can work long-term and doesn't have to look over their shoulder the whole time for changes.

Boyd: Boy, when it comes to the U.S. public pension plans, it's... So because I think, you know, more money and lots of it is really part of a lot of solutions, it becomes so hard. I would say there are a couple of things that I believe I've learned or heard from other people that, to me, make a lot of sense. So one is...and, of course, it's very important to remember that it's an extraordinarily diverse or heterogeneous problem. I mean, it's not the same in Wisconsin as it is in New Jersey or...you know, so it's a vastly different problem depending on what part of the country you look at. One thing I think that's important is trying to separate the legacy cost problem from the treatment of costs going forward for new service. And wrapping them up together can taint the politics of the treatment of new service as in, "We're so expensive, but it's not because we're offering generous benefits. We're so expensive because we got sins of the past to pay for."

And so separating that out, I think, allows a more rational discussion of service going forward. There are lots of issues that may come elsewhere in this conversation that I'm not an expert on, about benefit design and making it a proper part of compensation. So, you know, it may be that, you know, variants on the traditional defined benefit plan make a lot of sense. But anyway, separating that out and treating legacy costs separately. In most cases, treating those legacy costs is going to involve some very, very hard decisions as in they must be paid, there's going to be big sacrifices. Maybe we shouldn't be thinking about solving it in even 30 years, but, you know, isolating that problem, committing to it. It may be dedicated taxes, I mean, you know, I don't know, but I think the separation is important. There will be places where, despite legal protections, it's just not going to all get paid. And, I don't know, you know, I have some thoughts on how that might all work out, but there's no simple bipartisan solution until the crisis is so severe that, you know, they must act.

Mitchell: Yeah. And, look, I think, in New Zealand, part of the solution was reducing the problem down to something manageable. So successive governments had realized that, you know...in the U.S. they call it the third rail. We don't have subway systems and metro systems in New Zealand, so there's no, really, third rail equivalent, but the same idea applies that it's extremely politically dangerous to touch the, sort of, universal pension social security. And by accepting, you know...there was bipartisan agreement that there was this long-term fiscal challenge coming up, successive governments had signed up to the idea of fiscal responsibilities. So there's a fiscal responsibility X, so if you make a promise either in government or in opposition that you're going to do something, it's going to be costed out long-term. What is the cost of that promise? And so that sort of calmed down wild promises around social security.

And then it came down to this question of, well, we have this long-term funding issue, what do we do about it? Now, while there was bipartisan support for the institution of New Zealand Super to manage this fund once the government had established it, it was by far from bipartisan support of the idea for a fund in the first place. But there were sufficient guardrails around that in terms of Fiscal Responsibility Act, the Government Entities Act, that could contain that discussion and stop it from, you know, going off on wild tangents.

Winkelmann: So, another question...again, I'm off-pieced. So, I think in Sweden, the AP funds basically apply to every Swede, right?

Lundbergh: Well, the AP funds are the buffer fund of the Swedish Income Pension which I talked about before, so everybody's affected by how it performs. So, it's a national scheme under the supervision of the Ministry of Finance technically

Winkelmann: Right. And NZ Super applies to...?

Mitchell: So, NZ Super, it's a universal social security system. Now, the fund itself is not directly linked to that. The branding impression for the fund and the politicians is that the two are linked. And so, you know, if this fund is doing well, then somehow your pension is more secure in the future.

Winkelmann: So, my question, and it's going to come back to Don, so he can go last, but do you think the fact that those funds applied to basically all citizens was helpful in developing some kind of long-term bipartisan support for the institutions?

Lundbergh: One, it this pension system you had agreed upon and it needs to be implemented one way or another. The strength is you have one client. It's the pension system. You don't have someone who can move away, so you can be more long-term in that system. What I discovered in Sweden is, in order to build a good organization, you also need to have good people. And in Sweden, we pay roughly what we could earn in the private market but without big variable bonuses. But at least you get a lot of other values. You can really be long-term. You don't have to be out selling this stuff. So there's a lot of people who actually want to go there because it's really interesting work. I think a big challenge for the American public schemes is that you are a civil servant, so you're going to get people coming in there, and once they sort of build a name for themselves, they move out in the industry. So it's very difficult to build an organization if you cannot retain people in a good way. So, somehow, it's a bit strange that in America, when it comes to public schemes, they're very strict on the remuneration while in Sweden, we're able to remunerate in a decent way. We're not market-leading but we're not the market lagging, either. So good people is also an ability to actually do and take advantage of the long-term horizon you have.

Audience: Just a question just in order to compare. In New Zealand and Sweden, you have the main social security system which is tantamount to our social security system where in United States, basically, the biggest issue, it's not...I mean, we do have an issue in social security, but the biggest issue is the state and local government that has all these, you know, myriad of options. Do you have that similarity, too? Do you have those local attendants in New Zealand and Sweden or not?

Mitchell: Not so much in New Zealand. So defined benefit schemes for government employees were very popular until the 1980s, and then there were tax changes and almost overnight, all of those defined benefit schemes closed in new membership, interestingly, except for politicians and judges. They are the two groups that managed to, and I think still do, have these very gold-plated defined benefit schemes, but, you know, they're pretty small there in the great scheme of things. And the remnants of the former government and local government employee defined benefit schemes, or certainly the central government ones, are massively underfunded. But, you know, the government just treats it as a pay-as-you-go liability now rather than worrying about fully funding them because it's covenant as sovereign and undoubted.

Boyd: So I think it makes a huge difference whether the problem is a problem pertaining to benefits for a vast portion of the populace versus employer compensation for a specific segment of the population. So in U.S. defined benefit plans...so first of all, I think the employees and the retirees have kind of a proper moral claim on what was promised to them, and many of them may have made life decisions about their employment on the basis of a promise that they had every right to believe even if it was misvalued was, in fact, going to be paid and kept. So that's the first thing. Second, related to that is, in fact, many of them have beyond a moral and political claim. They have a legal and constitutional claim that in some cases is virtually inviolable. So, in Illinois, the state supreme court said, "Not only is everything you've earned to date sacrosanct, but everything you might earn going forward is sacrosanct in a sense that if you can get the wage, you can get the benefit. Now, you may not get the wage, you may get fired, you may get laid off, but if you have that job, you're going to earn at the same rate as it was promised to you 20 years ago on the day you were hired." So there is an extraordinarily strong claim. It's for a segment of the population.

The second thing I think that makes it difficult in the other direction is the resentment that this is a subgroup of the population that still has a pretty good defined benefit package when, in fact, many of the people who are voting for representatives to support tax increases or cuts in services or infrastructure have seen their 401(k)s decimated and, in fact, don't even have a defined benefit plan anymore. So those things make the politics really hard. And then, of course, the third thing is that... Now, listen, in New York where I'm from, the state teachers' union is, in fact, the single largest contributor, single largest, if you will, lobbying group of the state legislature. So changing this system which is protected with legitimate claims, with legal claims, and on the other side with this resentment, is really hard.

Lundbergh: Should I...?

Winkelmann: Yeah.

Lundbergh: My reflection is pretty simple. In Europe, you have Code Napoleon rather than common law, as a legal concept, and that made it easy to change the system if you wanted. So it's partly a legal question, but if the system was completely out of...you know, it didn't make sense, you could sort of change it, and it wasn't as hardwired as here. In Holland, for example, it doesn't matter if you're a civil servant or working in the industry, you end up in a similar solution with no hard guarantees. In Sweden, even if you wanted defined benefit schemes, you cannot get it today if you, sort of, start working. Some of the municipalities has a bit of off-balance sheet debt left, but all in run-off mode. It's going to be a problem, but, overall, we don't have the magnitude of the problem as here.

Winkelmann: So, you can sort of tell from the thrust of the questions, I'm trying to figure out what advice we as a panel would give to... Well, actually back to something Don said, so if you just look at the politics in public pension plans in the U.S., it's really hard to get it out of the political discussion, and you agree, right?

Boyd: Absolutely.

Winkelmann: It's totally a political issue. The question is, well, how do we get it out of that? What I'm trying to kind of get from the questions is, is there an opportunity to build this kind of bipartisan setup? So, one question that occurs to me relates to, like, how do you set metrics for measuring whether the pension system is delivering on what it's supposed to deliver on? And do they do it in Sweden? Is it available in the Netherlands? What happens in New Zealand? Should we do something?

Lundbergh: The problem of putting a decent measure on it is that they're paying that full pension today. So if you look at the historical, it seems like a great system. It's just, it's not going to be sustainable for the future, so the younger civil servants today, they're probably going to end up not getting the pension they hoped for. So it is a generational issue as well, but the problem is we're looking into the future and you can have a debate that the expected return will be higher, therefore, it will solve itself. But we can also say, "What if that doesn't happen?" You need to have a mechanism to deal with things when it doesn't turn out as you hoped for. And I think what they've done in Europe, I think New Zealand as well, is that they're trying to do it as good as they can, invest as good as you can, but if it doesn't deliver, there are no hard liabilities. So the problem is if you're promised too much, if you have too generous a deal and you need heroic returns to make it happen and you're not going to have those returned, you're going to be in deep trouble. It's not more complex than that. So, at some point, I think start thinking about softening the liabilities. If you can't do that, it's going to be a massive problem going forward.

Mitchell: Yeah. And New Zealand, I don't think it has any great metrics for measuring, you know, the long-term viability of the system. And like many other aspects of governed policy, what metrics there are are relatively short-focused, relatively financially focused. I'm sort of quite...you know, that's not an area I've spent a lot of time thinking about, but it's a really good question. I was interested...Mercers do, you know, this study on global pension systems and they created an index of global pension systems measured across, I don't know, something like 20 different metrics, and, you know, they think about adequacy and sustainability of the system and so on. And so I think that's a really interesting starting point. You know, they've given some thought to at least being able to compare systems and done this now over a number of years, have, you know, smoothed out some of the edges. Stefan's probably may have a better feel for this than I do, but I think there's something in there.

Audience: There's competition.

Mitchell: Yeah, there's competition as another consultant, but I think there's something in there, in that sort of way of approaching it, the multiple metrics looking at, you know, a very holistic approach to the system rather than just pure fiscal impacts.

Boyd: So, also, you know, getting kind of back to that separation of legacy costs versus ongoing service cost, when you think about pensions going forward, at least in the U.S., at least in the public sector, they're a part of compensation. And their lack of mobility or portability, the ability to take it somewhere. The fact that in the typical defined benefit plan in the United States, there are, if you will, kind of winners and losers in the sense that short-career employees may only get back their contributions with interest and nothing else whereas long-term employees get very valuable, you know, annuitized pensions. There's a whole host of issues, and they really ought to be mostly in the realm of what's the right compensation policy to make us, you know, kind of, appropriately competitive and good employers going forward? It includes, of course, valuing, you know, kind of, replacement income, but a whole host of other things. And so I think it's important to kind of treat them as part of compensation and compensation that you have to pay for. And there are, of course...so there are metrics. Urban Institute, Gene Steuerle and Rich Johnson are doing really good work there. Chad Aldeman has done a lot of work evaluating teacher pensions in the U.S. So there's a lot out there that evaluates these, you know, portability and other issues. On fiscal issues, I think, you know, I don't want to...you know, I mean, getting the numbers right is probably the very first thing, and then, in addition, constraining bad behavior.

Winkelmann: Don, could you come in a little bit on the question of what examples do you have in the U.S. where people have done it well? We brought up that question earlier about places like Puerto Rico, or Detroit, or Rochester, who are shrinking, that have a much bigger problem than others that are growing. Then you have this whole paradigm that you eluded to that, "Well, I work for the government because it's a crappy compensation, but I have all these great benefits. I can retire after so many years, have free health care for life, and get another job. So you have in California a lot of people who retire into early 50s, late 40s, have another career covered. So have you, sort of, seen places where people have targeted that effectively, or an example, sort of, where the thing has blown up?

Boyd: It's so much easier to find the latter. You know, I'm not an expert on this from kind of a benefit perspective. I would more refer you to some of the people I just mentioned who could really give you some good evaluations from the benefit perspective. I think if you're going to run a defined benefit plan and not blow it up, you know, there are some examples where having a low, hopefully close to risk-free or closer to risk-free rates...I mean, we've seen it in Washington. There are some other places that have, you know, come down or will come down, as in the 6% maybe to 5% range. And some strong rules requiring governments to pay, you know, what they are required to do, and let me just give a quick example of that because I find it kind of instructive. When you think about the worst state for pensions, you think about Illinois, yet...where they don't, you know, almost don't pay in. They have something called the Illinois Municipal Retirement Fund in which local governments participate. They're required to contribute, and so it's odd that one of the most...I don't want to call it most fiscally conservative, but, you know, a relatively strong fund can occur in a fiscally-irresponsible state, and that's because a state can make rules for its local governments. It's just so much harder to figure out how a state can bind its own hands. So, I don't know, that's kind of a partial answer to your question.

Winkelmann: Well, but that kinda gets to the nub of the issue, right? Because, I mean, like in the Netherlands, somebody made the decision to say, "Okay, you guys can't pick the discount rate. We're giving that to the central bank," right?

Boyd: Right.

Lundbergh: Yup.

Audience: Going in a totally different direction, at one point, I was learning about pension plans in different countries, and there's a difference in that, sometimes, the other countries have pension plans, state-sponsored pension plans for privately-employed citizens. But, it might have been Australia where the defined benefit, to a certain extent, might be adjusted depended on the returns so that anyone going into this knows that they're buying into what is inherently a volatile system and that the risk is held between the fund and the beneficiary, which, to me, it also would give people more of an alert system or trigger system for volatility of the market for paying attention to what kinds of market manipulations are going on and where. You know, are they using private equity? What's going on with private equity? So that there would be more buy-in from the participant, naturally, because they would have such an interest. It's not like you kind of, "Okay, I get this benefit and I don't have to even think about it for the rest of my life."

Boyd: So, I think it's the wave of the future. I think it should be the wave of the future. I think it is a way of getting the incentives a little bit better by sharing some of the risk and there are a variety of ways in which that risk can be shared. It can be shared through higher or lower contributions from employees. Should market performance be above or better than expected, it could be shared in the form of COLAs that only pop-up or go into effect if the plan is sufficiently well-funded or if investment experience was sufficiently good. And not only does it help to control the cost and risk to the government but it helps to create this kind of monitoring system that's, "Hey," you know, "I have to pay attention because my contributions or benefits might depend upon it." Whether and how it can be done in a particular state depends heavily on the laws in that state, and I think that's unsettled, but there have been some laws that say, "Yes, COLAs can vary." More laws that probably say employee contributions, that tends to be one of the things you can do. So, you know, I think there's a lot to be said for this kind of risk-sharing, and it's, in fact, on my agenda in terms of trying to evaluate it quantitatively, but I think it's an important issue.

Audience: A couple of observations. First, you're not going to get...based on what I heard about all of the case studies people talk about, you're not going to get major changes without an easily observable crisis that's going on. It's going to be hard to get big changes. So one valuable thing with this kind of forum and others like it...can help to figure out contingency plans for what the Dodd-Frank of pensions would look like if and when that thing occurs. In order to do that, I think, having that experience of what the rest of the world has done is really valuable in trying to design this. But you also need a conceptual frame, and a conceptual framework, I guess, I start for whom it is...I want to think about all of these instruments as forms of insurance. It is very rare...it goes back, way back... It's only in cases where all the risks are, it's very rare that more than X percent of the population gets exposed to this.

It's in, kind of, automobile, fire, some things like that. There, you can set up a system where you pay a fixed amount and you get insured for it. The kinds of risks we're talking about here are aggregate risks. Aggregate risks, by definition, cannot be entirely insurable. They have to be shared, and it's very unlikely that efficient policy is going to be to have the taxpayers bear all the risk and the employers barely none. So it gets me to a different way perhaps of making progress. It seems to me that the only way of making progress on this is if you can convince the contending parties that there's a win-win solution. So if you're going to tell the employees in the unions that, "That's it. Your defined benefit plan is going to be reduced."

Winkelmann: That's a non-starter.

Audience: Much surprise. They're going to say, "No, you're not going to do that. Over my dead body." But if you can convince them that they get to share in the upside if there's an upside, they get to share the downside if there's a downside, and the protection is that in the event of a really dire crisis, they would've had their benefits reduced by large amounts, and this protects them against that. It seems to me that the sales pitch has got to be something that you can promise both sides will gain. And, for that, it involves an accounting recognition that certain legacy costs have to be born and they're there. But it seems to me that that's... By listening to all the discussions about what Stefan calls a successful plans in the Netherlands and Sweden… They seem to have this in Australia as well.

Lundbergh: Yeah. At some point… I'm going back to the latest comments as well. If the system is not sustainable, it's not sustainable, and you need safety valves. And think, for example, increased demographic...you're living longer, basically. That's a massive hit to a system if you don't adjust pension age. So you could also argue that, let it be defined benefit as long as the general assumptions roughly hold, but if, like, longevity increases too much, we're going to adjust benefits. So you can have a sort of middle area where it's stable, and then if it sort of goes better than expected, you get your share of the cake, and if it goes worse, well, you share a bit of the pain. Because the world is inherently uncertain. You're talking about uncertainty versus risk, right? Insurance, car insurance is risk. You know the probability, you know how to deal with it. Long-term investing, you don't know the return, so that's pure uncertainty. It's impossible…

If you want a sustainable system, you cannot just offload that on one person. Let's sort of be a risk-sharing system. And I think one way or another, there has to be a safety valve if it's not going work. Otherwise, you're taking a lot of money from other people. So, as you said, this is a fairness discussion. Why should a certain group benefit when everybody else has to pay the bill? If you have to shut down street lights, close hospitals, but old people who work for the government are going to get their full pension, while people who work in the private sector are going to have a very, sort of, less-good pension solution. Is that fair? And I think that's also a societal discussion or question. Even if someone was stupid enough to write a stupid contract, the question is at what point can you break the contract? I think here, I'm very grounded in Code Napoleon, the European sort of legislation, while you're pretty much grounded in common law, and I think that sort of make things way more difficult.

Boyd: So if I were a public employee in a union or maybe if not, I would say, "Well, you know, you promised me this money and it's true, you made more promises than you can keep in aggregate. But why is it only my promise that you're breaking?" You know? And I think the counterargument would be, "Well, wait a minute. That was a mispriced promise." You know, "It was way more expensive than anybody realized." Maybe that's the argument. Maybe the school teacher wouldn't buy that argument, I don't know. You know? So, right now, the political arrangement is you cut services, you cut services, you raise taxes so the non-pension beneficiaries are burying the cost until it breaks. And then what happens is we cut the COLAs, we cut the benefits, and in fact, now, it's the pension beneficiary who's breaking. There's no easy way to bring all parties to the table except at the municipal level in the U.S. where bankruptcy is an option where everybody's at risk. So it's just one more element of just an extraordinarily difficult political situation.

Lundbergh: But the longer you wait...

Boyd: That's right.

Lundbergh: ...the tougher the problem. Right?

Boyd: That's right. I agree.

Mitchell: I think there's a very... Ontario's got an interesting model here. Ontario Teachers', you know...teachers everywhere in the world and, you know, they have very common set of political interests and clout. And, you know, Ontario Teachers' has developed this reputation as really one of the preeminent pension fund investors in the world. And there, the teachers and the employers, the state or the province, have come together and said, you know, "The management of this fund is beyond our powers and political interests, and so we need to employ expert people, non-partisan, to run it." And, you know, they have this sort of grand governing council, but it has no say in the management of the fund. That's all delegated to what is effectively a bipartisan or non-partisan selection of expert people. So it can be done in a teachers or public employees type of environment.

Lundbergh: I remember an anecdote, by the way. A long time ago, I was in a conference and Claude Lamoureaux who was the...the guy who set up Ontario Teachers' and turned it into what it is today. And then, Keith Ambachtsheer, the Canadian pension guru, they were in the panel, and they had a lady from Holland as well, Geraldine Leegwater. And I asked Geraldine, "If you were in the shoes of Claude, what would you do?" And she gave an answer, and I said, "In Holland, you cannot really pay variable bonuses and you cannot put so much compensation in there." I asked Claude, "What would you do if you were in her shoes?" He says, "I wouldn't take the job." So the point here is that what the Canadians have done, they've been able to run their in-house infrastructure team. They can run in-house private equity. They can do...because they have size negotiating power, it's much cheaper for them to hire high-powered people, pay them a lot of money, instead of paying fees to external managers.

But if you're not willing to take the political discussion that, "We would like to do that..." If you have to take... Like, the California Pension Fund, I mean, they have a pretty much tough cap on salaries compared to what you can earn somewhere else. And the only thing you can do, then, is take in a new team, they get a bit up to speed, and then they move on to a private fund. And that's really dangerous because, then, you're going to sit with a lot of what's called orphaned investments as a public scheme. So I think part of this is also, how do you want to organize yourself and structure yourself because it's very easy to look at the Canadian. And they're, I think, the only country in the world where they actually have commercial pay for pension fund managers. While in Sweden, Holland, and here, you are much more sort of distant. You have to use the financial sector much more, and I think that's also a missed opportunity with this sort of long-term investment horizon, actually doing good deals, that's going to have a different risk profile that you can buy in the market for managers.

Boyd: So do you think they should be more in index funds?

Lundbergh: Well, if you can't pay your people, it's going to be very difficult to sort of disintermediate, for example, infrastructure deal. And the question is how much value do you get if you're buying an average infrastructure fund because then it's not going to be the inflation-linked cash flows you're looking for, it's going to be more like an equity holding. So the challenge there, if you're long-term, you have to be aware that the player in the market are medium-term and they're going to flip facets at some point. So if you can think about that, you can do a lot of constructive ways to improve your return, but a lot of sort of the salary and comp put a constraint on that. I don't know how to solve this. In my AP fund, they've been a bit clever. So they set up a property company who was basically buying, what's it called, housing...no, social housing kind of properties, renovate them, and, therefore, they can charge a little bit more. That has been a brilliant investment. It's distant, but since we own the management company running it, we can give them complete different incentives. So even if you are caught in this, you have to be a bit creative figuring out what can we do within the rule or the area we are. And I think people are not creative enough, actually.

Winklemann: Well, and I think one of the things that makes that work for Ontario Teachers' and the AP fund and, actually, income...so, Alberta, when I was on their board, was that, first of all, they had the scale to actually do that. Secondly, they had the flexibility to set compensation rates. But the other real issue is, well, who actually sets the discount rates? How do you kind of pull that out of the political process? And how do you set the rules on hitting funding targets? So I'm sure one of the reasons Claude wouldn't have wanted the job is it was probably too constrained on the last two issues.

Audience: I want to get back to the mispriced obligation issue because, at least here in Minnesota, I think if there's one rule that is paid attention to, it's the plan actuaries. And Jeremy Gold notwithstanding was excoriated by his own profession for being so implicit in this list pricing. I don't see much movement within the profession, from what I can tell, of doing something about it. So it seems like we're in a bit of a hamster wheel until the state's experts get on board that we have a big problem. We have a bigger problem with making any progress on this. And I guess the question is, it's probably unfair to this group, but, you know, do you see, you know, the actuarial profession getting more serious about the issues that Jeremy Gold and others have talked about for some time? And do plan actuaries have the same influence in your countries in terms of, are they on board with using a risk-free or something close to a risk-free rate to discount these obligations?

Mitchell: Well, I think, you know, plan actuaries in other countries I've experienced, you know, they're driven by legislative requirements, perhaps, that set the discount rate rather than a lot of wiggle room to how they consider. They certainly carry a lot of influence wherever there are venture plans. So, you know, I worked for an actuarial consulting firm in the UK. I'm not an actuary, but it was a very large part of their business. And the actuaries are all-powerful, but in the UK, how much room they have...how much discretion they have to set the discount rate I think is not as great as in the U.S.

Boyd: So, you know, I mean, we have a few problems. Our problems are well-known, but just quickly, GASB swung at it and missed, which is that GASB still allows you...in fact, essentially requires you in all practical circumstances to use a discount rate that is based on an expected return on your plan assets, not by reference to a market rate but on your plan assets, and risk does not enter into it whatsoever. I think it's compounded by an actuarial profession which gives the same exact guidance to the private-sector actuaries that it does to the public-sector actuaries and say, "Well," you know, "we're providing..." You know, they can use judgment, but the problem is, within that judgment, they can do almost anything. What would change that...I do think there's a difference that, with all the problems of private sector defined benefit plans in the U.S., there are at least constraints. There are IRS-determined rates that govern the fund... There's two rates, the discount rate for valuation liabilities and the earnings assumption used for earnings on your assets, and the IRS constrains those rates for the private sector. Congress then messes with it, but I think you need an external constraint. The process by which you could get GASB to change its mind, which would be a good thing, is probably a decade-long process. So, you know, this problem could double in that time period, so there has to be some other solution. I don't think the IRS, the Congress is going to step in and constrain the funding rate, so I think it comes down to state legislatures.

Lundbergh: Can I give you a nice comment? I'm thinking like in Holland and the UK, it seems to be 45 years is the magical age of an actuary when they actually shift from... If you're above 45, you think it all-term thinking, and the younger one has a more financial view on it. So as Samuelson said, science makes progress funeral by funeral, so maybe you should give early retirement to actuaries and actually change the system.

Boyd: That's a great idea.

Lundbergh: But what is intriguing with this is we did some pro bono work for one U.S. public thing, I'm not going to disclose anything. But they agreed, we have the wrong discount rate, but if we would move to a fair discount rate, we basically will go bankrupt as a state. So the problem here is, sort of, you have to say, "Let's use a proper discount rate, but we need to change sort of the funding or how you're going to catch up your funding gap." Otherwise, mentally, if you measure...the measure says everything is hunky-dory, there's going to be no problem. It's like, "Oh, there's no problem here. Just continue as usual." If you have a measure saying, "Oh, you really are in trouble," and now you need to work out a plan how to solve it. But instead of having taken all the pain upfront, you can amortize the pain over a longer period. And I think it's very simple, but the challenge is I can't fully feel with someone being an actuary or working for a state scheme because you don't want to put California or, you know, Illinois into bankruptcy. So, therefore, you start playing around with the discount rate.

Winkelmann: So, I remember in 2009 when I was at GSAM, division management got the brilliant idea that after the financial crisis, we should go around and consult with every single state because, you know, we could help them. And, by the way, that got me to lesson number one in dealing with senior management which is if they have a good idea, go the other way. So, anyway, you know, I don't have...I mean, I did it. So I put together this report, and we went through state by state by state by state, and we said, "Okay. Well, here's the discount rate. Here's what your stated discount rate is. Here's the corporate rate," and the corporate rate is actually taken out from the...corporations can't pick. You know, the Congress said, "You have to use that," and it is a monthly rate. And then we said, "Let's use the treasury rate." So we went and then we talked with all of these...actually, I think we made it through 15, and the answer was about the same.

So, basically, it was like, you know, "Nice work, fellas. All you're telling me is I need more money." And the CIOs actually know the problem. So I have yet to meet any chief investment officer who doesn't understand what the problem is. The issue is entirely political on about how do you kind of transition to something. And I like Don's kind of point about saying, "Why don't you set up a legacy portfolio? Why don't you amortize the laws?" But, frankly, if I were to buy municipal bonds, I'm not sure I'd buy a bond from a state that didn't say, "Okay, at the same time, I'm changing the rules of how we're doing business," right? So they kind of, to me, go together. Like, the best thing for me would be to say, "We'll recognize it. We're using a market rate or amortizing it, everybody's sharing a thing, and we're changing the rules." And I think it's the last one that's like, how do you get the bipartisan support to do the last one?

Boyd: You have questions. I couldn't agree more.

Audience: This is a little bit to that point. Rhode Island was able to make changes,

Winkelmann: I live there.

Audience: Yes, so tell us about Rhode Island.

Winkelmann: So I can talk at one level, and basically...and it gets entirely to the politics. The governor, Governor Gina Raimondo, she basically said, "This is a big math problem." And she went, like, meeting to meeting to meeting to meeting to meeting to meeting and she said, you know, "Let's just stop the politics. This is a math problem. How do we work out the math?" And they listened, and she took a lot of political heat. She didn't get re-elected, but it took...I think everybody who was involved with it said she had to really step up and show leadership to say, "We're gonna pull..." Actually, this is to the point that both Stefan and Tim made. It became...it got pulled out of the political process to a certain extent because Rhode Island is a very, very blue state. So, I mean, you know...

Boyd: And so when... Yes, as an observer, my view is she was absolutely masterful in achieving a partial political solution to a huge problem. The Bureau of Economic Analysis...not now but, hopefully, in a week or two you'll be able to get back to their website. They have numbers. They recalculate pension liabilities for all of the pension plans, or they estimate, all of the pension plans in a state. So it's a nice...they do it with a low discount rate. I think they're down to about 4% now, and they... So, for every state, you can construct from their data a measure of unfunded liability that's reasonably comparable across states, reasonably appropriate from an economic perspective, and then you can compare that to, for example, the state GDP. If you do that for Rhode Island, you would find that they're better now than they were before the reforms. They're still one of the most deeply-troubled states by that measure.

Winkelmann: Yeah. That's true.

Lundbergh: One thing with defined benefit is that since they combine pension with the discussion around the compensation, sometimes, you know, it's easier to give someone better pension than increase the salary somehow, right? So it's a lot of gaming going on in the system, and I find it... I mean, although firemen does an amazing job, but why should you work for a relatively short period and then basically have a full defined benefit pension so you can start your second career? I mean, where else do you get that sort of opportunity? It's unheard of.

Mitchell: It's just...

Winkelmann: Yeah, go for it.

Mitchell: Completely unconnected…

Winkelmann: That's okay. I went off-piece, too.

Mitchell: In sort of thinking about this, I was going back to some of the work that my former colleagues at the New Zealand Treasury have been doing on the affordability of the New Zealand social security system, New Zealand Superannuation. And it's sort of quite easy because they publish all their working papers on their website to, sort of, troll through them, just figuring out where their thinking is at. An interesting paper, at least I thought was an interesting approach to this was they did some survey work, and using a sort of peers matching, driving people to...how do you make trade-offs between, you know, the level of a pension, the age of eligibility, taxes now or taxes in the future, etc. And through the sort of peers trading survey, they came to some very clear conclusions about what it is that people were looking for in the design of the system. And I thought, you know, that's pretty interesting because, you know, we sort of pensions experts and practitioners and so on can sit around and debate it, but it was interesting to go out to people and give them simplified but realistic choices about the trade-offs they have to make and where do they land. Now, whether that will ultimately find its way into public policy there, I don't know, but the paper's available on their website. It's pretty detailed and quite interesting for me.

Winkelmann: Yeah.

Audience: The simplest case, pension finally asks the federal government to help bail them out of their problem. Has there been any appetite of states and the federal government in bailing out, or is that, you know, just considered to be a no-no? And I hope it's a no-no.

Winkelmann: Okay. Can I give my...? So here's my reaction. I'm with you. I hope they don't go. That said, we got a pretty long history in the U.S. dating back to Alexander Hamilton of the federal government not bailing out the states. And I think the most famous example is from 1975. I think it was The Post or the Daily News, I can't remember which one, which was "Ford to mayor: Drop dead." And the point was that New York City was near bankrupt, in fact, it was bankrupt, and they went hat-in-hand to the federal government to ask for funding and the government just said...well, the federal government said, "No." So, you know, we have a pretty long history of not bailing out state debt. And I think at this particular point, correct me if I'm wrong, Don, but it doesn't clearly seem that there's gonna be a viable option.

Boyd: Yeah. I think that the only thing that's likely to make to the federal government step in administratively, what I mean by that is without Congress, is if there were a risk that was systemic leading to potential problems with the municipal bond market. And I think the last time...and I've talked to the folks at the Fed. They've assessed this. They concluded that's really extremely unlikely, that states have problems. There's a moral hazard if you help them out. If it's not going to cause bond market problems, it's not really their problem. That said, I think that there's room for a federal role, and in my mind… Going back to New York City, one of the things that was done in the New York City fiscal crisis is the Municipal Assistance Corporation had bond covenants that essentially froze in place new rules because it would be, in an event of technical default, absent if the state changed the new accounting rules and other systems imposed upon New York City. I can imagine a once and for all solution for a state that said, "Take the legacy cost, find a way to compromise it down. Bond it out with a pension obligation bond. Allow a federal tax exemption that is not currently allowed." That, to me, would be a potential national interest in a federal role for something like that, and use the bond covenants to freeze in place to fix the going forward part and also constrain the backward part. So I think that's a potential federal role. There are some other ways in which Congress, I think, could play a constructive role.

Winkelmann: And on central states...so that one actually... In my old life, we actually managed their money. And that one was...actually, has anyone seen the movie "Casino?" Great movie from 20 years ago. So that is actually about central states. So the mob was basically managing money, and the Department of Labor stepped in and said, "Okay, you can't manage your money anymore." And the Central States Board, which was union, and employers were told they had to hire an outside money manager to manage the whole fund. They actually put a constraint on fees, too. So that was the role for the government in that one. Yeah.

Audience: Just wondering if you could point out central states in the western [inaudible 01:20:14] because of the Teamsters, which for many years was in the black. I guess it's not doing as well now.

Winkelmann: Yeah, that one, I don't... Yeah, it's been a while since I paid attention to that, so I can't point out that... I don't think they had the mob running their money, though. So I think we've concluded it's a problem. I think we've concluded that somehow, separating the legacy funding issue from what happens going forward might be a viable way for U.S. public plans. I think we've concluded that the more we can get this out of the political process or get some kind of bipartisan support, that's probably helpful. And I think we've probably concluded it's not going to get fixed overnight. So I think we'll end. I want to thank my panelists for joining us.