PANEL 1: PROJECT FINANCE BONDS IN THE EMERGING ECONOMIES: LATIN AMERICA AND THE MIDDLE EAST

MODERATOR: Sergio Galvis
PANELISTS: Troy Alexander, Sergio Bronstein, Carlos Fradique-Méndez, Richard Lincer, Waide Warner

MR. JONATHAN CARDENAS: Our first panel is titled Project Finance Bonds in the Emerging Economies and will be led by Mr. Sergio Galvis. Mr. Sergio Galvis, partner with the New York Office of Sullivan & Cromwell, is widely recognized for his broad-based international experience. He represents a diverse group of clients including government bodies, corporations, investment banks, and other organizations. Mr. Galvis has been recognized in a number of publications including, *Chambers*, *Euromoney*, *IFLR*, and *Latin Lawyer*.

Mr. Galvis writes frequently on international legal and financial matters. He received the Burton Award for Legal Achievements in 2004 for his article *Sovereign Debt Restructurings—The Market Knows Best*, in 2010 for the article *Latin American Firms Pursue Global Status*, and in 2011 for the article *Introducing Dodd-Frank*.

Mr. Galvis was part of a group of eminent practitioners convened by a G-10 Working Group in 2002 to develop collective action clauses for sovereign debt financings and was a participant in Secretary Henry Paulson, Jr.'s 2007 Conference on U.S. Capital Markets Competitiveness. A graduate of the College of William and Mary and Harvard Law School, please join me in welcoming Mr. Galvis and our panel to the stage.

MR. SERGIO GALVIS: Thank you all. I put on my little iPad here to tell me if I'm going on too long but you're going to help us out, too. So I want to thank all of you for coming to the symposium today and for getting here early to join our first panel of the symposium, which is to talk about the role of project bonds in project financing. I especially want to thank a bunch of folks at NYU, and I want to do it really quickly.

The NYU Law School of course for hosting us, the *Journal* for organizing this, and I really agree with Professor Scott that you guys have done a terrific job. One of the things I do at

S&C is I head up our recruiting worldwide, and I can tell you that NYU and NYU students are at the top of our list in terms of the students we look to attract to our firm, and I think that's true for my colleagues here as well. And the role of the *Journal* in establishing that nexus between law and business, which is after all what all of our law firms do, is critical to the success of the NYU students so thank you for both what you do in the *Journal* and for organizing the panel. Obviously also, thanks to Professor Scott for joining us, notwithstanding lingering effects of her flu. And a special thanks to my panelists this morning.

There are bios inside the program, so I'm not going to go into the bios because I think you'll really want to hear more about the substance of what they're going to be talking about; but we have today Troy Alexander, a partner at White & Case, who is really their—in the case of each one of these folks here actually—their leader, and so that will apply to each one of them, in the project finance space, especially bonds. We're very lucky to have Troy here. Sergio Bronstein, from the Veirano firm in Brazil; Carlos Fradique-Méndez, from Brigard & Urrutia in Colombia; and Richard Lincer, from Cleary Gottlieb; and Waide Warner, from Davis Polk. It really is sort of an all-star panel we have here.

I'm going to give you a note of apology up-front. I actually tried to back off at the last minute sharing this panel not because I didn't want to do it. Actually I've been really excited about doing it for months, but I got myself in the middle of a deal where, literally, we were going all last night. We're going today so I'm afraid I'm going to have to leave early so please accept my apology for that. I'm really, really disappointed to have to do that, but Troy—an alumni of the law school—has kindly agreed to sort of pick up the mantle when I step out.

The format is going to be hopefully interactive and hopefully very interesting for you all. I'm going to wrap up with my comments by pointing to a couple of slides that I prepared to introduce the topic of project bonds. Then Waide Warner will get a little deeper on that topic by talking about two case studies that he will introduce. Sergio will give us a briefing on the Brazilian market, Carlos on the Colombian market; and that's very important because those are two countries that have tremendous infrastructure needs—massive infrastructure needs. And project bonds, as you will hear from everybody on the

panel, actually as a matter for financing projects lend themselves particularly well to long-term infrastructure projects; I think Colombia, the Brazilian-Colombian cases, are terrific.

Jonathan, I've been looking for the Brazilian flag but I'm glad to see the Colombian flag is here. Then Richard will talk about—I talked about the importance of infrastructure long-term—Richard will talk about the pitfalls that come from that and some of the challenges that can come from that, and then Troy will close up with a discussion of the issues around having bondholders as lenders in a project financing side-by-side with more traditional lenders like export credit agencies, multi-lateral institutions, and commercial banks that are in the lending business.

So with that introduction and a sense of what is sort of the map that our panel will look at, if we could put up on the screen—maybe we have it already—the slide on project finance.

Let's go to the first page, page two. So all right, what are project bonds? You got a sense of what I was saying earlier. Project loans, which are traditional — banks, export credit agencies, make loans, they disburse the money over time — and then you talk to them when you run into problems. Project bonds get offered broadly to investors who are looking for yield. They generally give you all the money up-front; the $500 million, the billion, the $3 billion up front—Waide will talk a little bit about that—and then you've got to spend it over a period of time as you build out the project. They are used for expansions, what are called brownfield projects. They're also used for greenfield projects—brand new port or a pipeline that you're building, or an LNG facility.

If we go to page three—and, Jonathan and Jesse, I assume that the folks will get copies of these or maybe have them already—project bonds are great except when the markets crash. And when the markets crash, the market for project bonds basically closes up. So one of the lessons you will hear from our panelists today is if you're looking for project bonds to finance your project, you also have to have a Plan B, and that Plan B often is run in parallel, side-by-side, with the offering of the bonds.

I'm going to focus just on a couple of other pages. Let's go to page six—some of the risks associated with project

bonds. It's also a benefit. As I said, you offer, you close, you get all the money up-front, you lock in the interest rate for 15 years, 10 years, 12 years. You might get a great interest rate, if you head into an inflationary environment and interest takes off. On the other hand, if you had done the financing in 2006 and you see what's happened to interest rates across the world, especially in the U.S., Europe and Asia, they dropped significantly. Then you're locked in with an expensive bond for a long period of time, so it's a two-edged sword. If you want to pay them early because you ran into trouble, you need waivers, or if because of your interest rate is too high you really can't make voluntary pre-payment. You can make voluntary pre-payments but it's expensive because the bondholder said "you know what, I'm taking this risk for 15 years. I'm happy to lock in this rate, and if you're going to take that my opportunity to have that rate at that level, you're going to have to pay me for repaying me prior to the stated payment date."

I'm going to mention one last thing and then turn it over to Waide for the case studies. On page seven I mention a couple of other issues. One of them is the negative carry, and this is probably the single biggest obstacle—I don't know whether the panelists will agree with me on this—to the development of a robust project bond market. The standard bank loan in project financing gets disbursed as you need the money. You're building up a project. You're putting in some equity. You're putting in some debt. Your contractors are delivering trucks and equipment, services, and the lenders are sort of doling out the money. Generally, there are some efforts to modulate that and some of the folks here will talk about that, but generally the project bonds, as I said up-front, if they close, you get all the money up-front.

What do you do with those billion dollars? You spend some of it as quickly as you can, but in the meantime you've got to put it in a bank account. And, in today's environment, the bank account is not going to give you much money so you have to factor in the fact that you're sitting on all this cash. Maybe you even have to hedge it, so you might have some hedging costs, and that's a challenge. As you think about project bonds, they're a great product, but that's a challenge that I think our panelists will get into deeply. So with that, let me turn it over to Waide, who's going to give us a couple of case studies on this issue for about five or six minutes, and then

maybe if we have time before we go to the next panelist, I'll ask a couple of questions of Waide really to stimulate your thinking. Toward the end, we're going to wrap up this part of the panel at 10:30 when unfortunately I have to turn into a pumpkin. Troy will guide us through really taking questions from the audience.

MR. WAIDE WARNER: Thank you, Sergio. We're going to just take a few minutes to talk about some of the general themes that Sergio set out for us, and try and outline them in real-world examples. The idea is to try and give you a sense of how these things play out in the real world and the practical potential for project bonds in a capital structure for a project. And I'm going to talk about the Ras Laffan liquefied natural gas project in Qatar and the FertiNitro gas-to-fertilizer project in Venezuela.

Ras Laffan was the very first project financing to demonstrate the potential benefits of project bonds in a capital structure, and Ras Laffan kind of took that to another level of intercreditor competition to give good terms to a project sponsor. Ras Laffan is in the Emirate of Qatar. It's a tiny little country on the wrong side of the Strait of Hormuz and it discovered in the early 90s that it was sitting on one of the world's largest gas fields; which was a wonderful thing, but it also created a challenge, because the problem with gas is you can't store it. You've got to send it through a pipeline, and the only pipelines went to places that didn't need the gas either. And Qatar certainly didn't need the gas so they had to find a way, and liquefying the gas is the way to do it. It requires massive equipment to freeze the gas down to a liquid so that you can send it in very specialized tankers to a country that actually needs it and that turns it back into regular gas and burns it.

So they found that they were in this wonderful position but nobody knew who or even where they were. They had never been to the bond markets. They were run by an Emir. There was no actual law. It was really what he said the law was. There was no constitution. There was simply the Emir, and this created a certain level of political risk. So typically when in that circumstance the commercial banks and the export credit agencies bear that risk, and this project went to those typical folks to try and finance this project which was $5 billion, and they were going to have to have $3 billion of debt.

And so they had export credit agencies from all around the world: U.S. Ex-Im Bank, Coface, SACE, KfW in Germany, UCGD in England, everybody, and the Japan Export Import Bank now called the Japan Bank for International Cooperation. And then at the very end, at the very end, somebody said you know—Goldman Sachs was their advisor—somebody at Goldman said maybe we should just throw in a bond. Who knows, there might be a possibility of a bond, and it was just there in the capital structure as a possibility; but as soon as the invisible hand of the bond market was introduced, it had a remarkably galvanizing effect on the entire process because normally export credit agencies are very process oriented, relatively deliberate and definitely slow. And the bond market is anything but those things. The bond market is quick, and as Sergio said, the bond market is closed. They open, then close and so the fact that the bond market was there waiting to be taken pushed everyone forward with enormous speed. And it turned out as the bond got more and more oversubscribed, there was less and less need of any particular export credit agency and so that made them all have to conform in effect to what the bonds were doing.

And it was a remarkably eye-opening occurrence because the bond market literally took off with that deal. The lessons of inter-creditor competition that we focused on in Ras Laffan were then later put to use in the FertiNitro project in Venezuela. They had sort of a different problem. They had a huge oil reserve, but when you pump oil, you pump gas, and you have to deal with the gas and they realized they couldn't burn it anymore because you can't do that, so they had to make something out of it. And there are through catalytic processes ways to make gas into fertilizer and that's what they did. It cost a lot of money to do it. Like the liquefied natural gas it's about a $1.5 billion facility and they also thought about going to the export credit agencies. They got one in Italy but they thought about having project bonds from the very beginning. And in fact, we built into the structure project bonds in the term sheet stage and then effectively auctioned the term sheet, held a competitive bid on the fully blown out terms of the transaction to a number of banks and ECAs and matched them up.

That competition also drove the fact that everyone knew that they might get taken out by the other guy and so the

trend sort of merged to the middle which was very, very helpful to this project later. And then, of course, when we did the bond deal, because of the marketplace, we did this a year after the Asian crisis and this deal was—they had had a whole bunch of heavy oil deals lined up—and this deal was way back in the queue. It was a little petrochemical deal with Koch Industries of the U.S. and the National Petrol Chemical Company of Venezuela. And there were all these big, heavy oil deals that were coming but they were export credit agency deals. And this deal, because we were focused on getting to the bond market, we had finished the documentation in 119 days start to finish and we were ready to go and the others weren't ready to go. And so they said, all right fine, if you're ready to go, go. So we hit the bond market. They incredibly got one of the tranches of the bonds to be 27 years. It was a terrifically exciting and successful deal, and the Russian crisis happened in August. This was in April.

In August the Russian crisis happened and there was no more bond market, and the deals that they jumped ahead of took three or four years more to finally get financing. So that was a terrific lesson as well as to how you really do need to move, and the bond market itself will move the participants in ways that you typically won't find.

MR. GALVIS: Waide, if I could just ask you a question on that—

MR. WARNER: [Interposing] Sure.

MR. GALVIS: —because I think you've hit the key point that shows up in the case studies. The timing was perfect in both of those deals, but you also had to plan for the possibility that the Russian crisis would have hit earlier. So I think it would be useful for the audience, and the students in particular, as a practitioner to sort of drill down on how as a lawyer you keep the banks happy while you're using the competition of the bond market to also push them—keep them interested because you may need them, but at the same time push them because the bond market gives you that opportunity.

MR. WARNER: That's a very good point, Sergio. I mean I think the way that you keep the banks happy of course is that you have a backup plan, and the backup plan you always have to have a backup plan. You have to have, as Sergio said, a Plan B, and so one of the ways we thought about the capital struc-

ture in FertiNitro was we made sure that there was a fully funded bank deal available that we were ready to pay commitment fees on; but we baked into that deal, because everybody wanted to do the bond financing, we baked in the possibly of doing bonds so that—if we move to the next slide—we hoped for the best and prepared for the worst. So we had a fully financed deal on the bank side, but we also wanted to try and reach a much more ideal bank bond mixture with Plan B. So we targeted a capital structure that had a significant piece of tranche of bonds with a long tenure.

And to Sergio's point, of course one of the ways you keep the bankers happy is you make sure that they're in both syndicates. They're going to be lending money with the backing of an export credit agency in this case, but they also have a place in the bond deal and so they'll get fees as underwriters. Fees really make bankers happy. It's a remarkable thing. They're really about the money so that's a good thing to focus on. We don't tend to be as much about the money but it really matters to them. And so that's at least one way to do it.

MR. GALVIS: And that's a great point. You're paying commitment fees and then you're paying transaction-oriented fees. It's actually one of the reasons why, for example, some of the big oil companies that we all work with just say I'm not going to project finance. You know I see the benefits but it's just expensive. On the other hand, others see the risk allocation benefits.

MR. WARNER: That's a very good point—[inaudible]—typically said no way. I'm not going to do project financing until they went to some places that were so risky that they said we'll do it with other people's money and that was the real reason, not because they needed the money.

So then I think one of the things that I guess you're moving toward and probably we ought to talk about is the parallel track. Not only do you make sure you've got a backup plan, but I think you really do have to organize the deal so that the bond deal is running in parallel with the bank deal so that you're prepared at any given time to jettison the bonds if you have to but take them if you need them. And of course you don't have to necessarily get the bond deal done right away.

As Sergio said you can decide to go off track a little bit. If the bond market is not there you've already baked the possibil-

ity of it in. You can proceed to close with the banks on the fully funded deal with commitments for the whole. And when the bond market is there, hit the bond market and the documentation is already ready for it. So doing it all up front has a small initial extra cost but it's a major benefit later.

We just finished a project bond for a drill ship, a big drill ship, a billion-dollar drill ship for the Brazilian market; and that had been done by export credit agencies with a regular long-tenured project loan, and there was no possibility of doing the bonds. It wasn't there. We had to completely redo a number of the documents because they didn't fit a bond at all. The creditor arrangements weren't possible. So to plan it in advance I think is one of the key elements of being able to—

MR. GALVIS: [Interposing] And if I could just interrupt, Waide, only because I'm going to—I warned our panelists that I would try to be as nice about it as possible but I was going to be brutal about keeping us on schedule—but I think the point you make is just critical.

Waide mentioned that FertiNitro went ahead of a couple of heavy oil projects that had been planned. I was involved in one of those, and because of the Russian crisis we did the bank financing but there was a gap in the financing. There was no way the capital markets were available; and essentially the sponsors, knowing that we're prepared to make sponsor loans, and that's how they substituted for the bond markets.

So, Sergio, you're looking at the international market and you're seeing all these issues and now you think about Brazil—big, big infrastructure needs and they're starting to think about how to access that very deep domestic capital market on the bond front as an alternative to BNDES, the development bank.

MR. SERGIO BRONSTEIN: Sure. First of all I'd like to thank Jonathan for the great invitation here. It's an honor for me to be present here and share these great ideas with the panelists and the audience.

I think the critical path that Brazil needs to follow is basically understand and learn from international experience. I mean we all know here that the World Cup is approaching. We are like 14 months away so most likely you're going to be seeing the Brazilian flag standing out over the stadiums very soon. We're going to have international assembly—

MR. GALVIS: [Interposing] TVs for everybody so you can watch the football games.

MR. BRONSTEIN: Yeah, mostly like all the tickets will be sold out so most of the Brazilians that I know won't be entitled to go to the games but it's a different story.

We also have the Olympic Games approaching within three years' time, and I think both of you have touched very important issues so far. I mean what is critical for Brazil when the Brazilian equity market has been significantly developed for the past couple of years, but we haven't really tested how the Brazilian market will react vis-a-vis the need of shifting the mindset. The short-term mindset from Brazilian investors and their rationale—to actually allocate their resources, putting their investments in Brazil and trying to have long-term rewards.

I'm going to follow you from the presentation. I'm going to touch a little bit on the regulatory framework and how Brazil is somehow adapting and adjusting to the international needs, but the thing is 2013 and 2014 will be critical years to really test the waters and see whether or not Brazil is on the good and right path to welcome foreign investments. And the most important legacy, that all Brazilians need, is to make sure not only the Olympics and the World Cup go well, but more important than that they're going to have a real legacy in terms of infrastructure.

Brazil as a continental geographic country needs to really foster all investments in highways, railways, ports, infrastructure, oil, gas and all you can imagine; and I think the country is on the right path. I think the second panel of the day will be about public and private partnerships, and I think this has already been tackled. The many needs of Brazilian country—and you know that for example some of the stadiums have been built with the PPPs in place in Brazil. The yellow line, which is a huge extension of the São Paulo subway system, has also been construed and paved through the channel of the public private partnerships.

And the great news that we got from President of BNDES, the Brazilian Development Bank, Luciano Coutinho, is that BNDES has already pledged, or informally pledged, an investment for the next two years of roughly R$500 billion Brazilian reals with eyes solely on infrastructure projects. So it's a huge

boom, and in Brazil the highest pick of investments reached roughly $170 billion back in 2010. BNDES remains a pivotal financier for the long-term infrastructure projects in the country; however, it's impossible for them to bear all of the demands and needs of the country AND—

MR. GALVIS: [Interposing] Sergio, if I could just interrupt here—

MR. BRONSTEIN: [Interposing] Sure.

MR. GALVIS: —a second because, you know, when I look at Brazil, I actually see BNDES as perhaps posing one of the biggest challenges to the success of development of the bond market. In other words, it is so easy in a way for the Brazilian sponsors to go to the BNDES product. Not that BNDES is easy, but it's there. They're familiar with it. They sort of have learned to live with it. To what extent do you think BNDES potentially crowds out the operation of the capital markets on the debt side? Or do you think that the demands are so tremendous that you're going to have BNDES and capital markets?

MR. BRONSTEIN: I would go for the latter, but I think you're absolutely right. BNDES is not so easily reachable. On every single infrastructure or any kind of long- or even short-term loan commitments that the companies need, they would go and knock on BNDES door. There is bureaucracy. There are the hurdles to negotiate. They are a tough bank. They have their—what they call the golden rules of BNDES, so basically you simply have to adhere to their conditions; but at the end of the day sooner or later all the Brazilian companies would know that BNDES would be a safe harbor for them in order to reach and have access to investments.

On the other hand, I think BNDES had a critical role in actually welcoming this new regulation that somehow created a path that would go out toward a framework to create the infrastructure bonds.

MR. GALVIS: That's good. That's a very—

[Crosstalk]

MR. BRONSTEIN: And this is critical and I guess just mixing a little bit through the slides, but at the end of the day what we have in Brazil is a new law that was passed on June 27, 2011. It has not been tested yet, but it has somehow created a very important legal way for you to get access to the capital markets

and somehow shift again the short-term mindset of investors that would look for potential opportunities.

Brazil—just backing off a little bit—Brazil is a country of continental dimensions. Just bear in mind 15 years ago, by the time I was admitted to law school—I mean if I had like a couple of bucks I would certainly do nothing and just live with interest rates. Brazil was a country that one could live just surfing the interest rate of the country. We had an interest rate back in '99 of 45% a year. So any investor locally or internationally would not spend a dime with transactional cost or thinking about interesting strategies to raise money, because it could simply sit comfortably on its couch back at home and do nothing as the money would work for you.

Nowadays Brazil—in December and then the Monetary Council—confirmed that we achieved the lowest interest prime rate of the country. It's still high compared to like international markets, especially mainly Europe and U.S., but we are under 7.25% prime rate; you have to bear in mind that inflation in Brazil is roughly at 6%. So at the end of the day the same person that would be simply sitting on the couch and waiting for having the revenue generated by itself is gone. So it's a different market, and this new law that has been passed basically sets forth a huge tax incentive—not only by Brazilian locals but more importantly for non-resident investors that are willing to commit their revenues and actually wait and see an infrastructure project being in place. And they are willing to take and serve the big wave of prosperity that Brazil has in its hands.

So I think it's 2013 that we are reaching a momentum of the history that's critical for the improvement and for the additional milestones. The international experience is more than welcome. I mean Brazil is still testing the water and getting to know what's going to be, but I guess the two major paths to be followed are trying to convert from a commercial perspective the mindset of the investors as a whole, including commercial banks, that they should have appetite, and they should have to sit down and wait to get long-term revenues, long-term duration of cash for project finance bonds. You cannot have four-year term maturities for a bond like that because it's against the natural policy of the bond itself. And more important than that I mean we do have huge needs, and Brazil is really a stable country that I think it's a good bet.

2013 will be certainly a critical year for us to see whether or not we shift this mentality and how we shift the way the market takes place in Brazil. And I think it remains to be seen, and most likely within the next couple of months or years maybe we'll be sitting together, gathered together to talk a little bit more the precedent about the transactional and track records that we have seen in the past.

MR. GALVIS: I think that's terrific, Sergio, thank you. And having been on other panels with Sergio and other colleagues of his at Veirano and other firms that I know in Brazil, I know that when we get to the Q&A there will be a disproportionate number of questions aimed at you. As I said, we really hope—Waide also had quite a few other points on his slides—we really hope that doing the Q&A we'll be able to—each one of us will be able to dig into those deeper.

So we'll move a little north of Brazil to another country that has tremendous prospects and also enormous infrastructure needs; in part because as you know when the Andes get up to Colombia they split into three. And integrating a country that is split by mountains like that into three mountain ranges is a challenge.

MR. CARLOS FRADIQUE-MÉNDEZ: Yes, definitely. Thank you so much. First of all I'm going to use my slides here that unfortunately are not in the printed materials, and I apologize for that. You're exactly right, Sergio.

One of the challenges that we have is geographically speaking Colombia is quite a challenge and an opportunity as well. If you have had the chance of visiting Colombia, you will have seen that the mountains that Sergio was referring to not only provide a beautiful landscape—and I'm obviously as biased as I can be—but also a challenge for engineers, financiers, and also lawyers as well.

I will now be very brief. I have a few slides to share with you, and I'm going to be talking about three matters very generally. We have had a limited use of project bonds so far, and I have a few figures to share with you in a couple of seconds. The challenge ahead that relates to the geographic challenge we have in the local economy for infrastructure, the fact that security wise we had been constrained in developing infrastructure for many years. And we're very hopeful that this is

going to change for the good by the end of this year and that's what we all cross our fingers to have as a reality.

I don't know if you have heard, but about two years ago we had serious floodings in Colombia, which damaged the fairly poor infrastructure already. So we have a $40+ billion pipeline of infrastructure in the immediate years, and that's part of what brings us here today; and some comments as to what we're developing in the local market.

So very quickly we have had a number of project bonds; mostly brownfield or after construction in terms of greenfield projects. I have listed a few of these just to show you a bit of the flavor in terms of the sectors that are involved and the issuers. You will see there a number of projects that are financed through the use of SPVs very much in the form of securitization type structures but also some is straightforward bonds as well.

And in general the features that they have shared so far is that they will for the most part not have construction risk. The appetite for construction is mostly placed in banks, and the local banking system is fairly well suited to address those issues. In terms of the—

MR. GALVIS: [Interposing] So, Carlos, on that what are they doing? They're financing with the banks and then are they taking out the bank debt—

MR. FRADIQUE-MÉNDEZ: [Interposing] Well that's exactly right.

MR. GALVIS: So it's in effect a refinancing.

MR. FRADIQUE-MÉNDEZ: It is in effect a refinancing for the most part. Traffic risk, one of the commercial risks that are not typically transferred in terms of structuring project bonds in the local market. That really relates to the fact that budgetary locations are used as the underlying asset for many of these structures as well, and this is what the third bullet point refers to. This is guaranteed by what we call fiscal future payments which are really budgetary appropriations in the Republic's budget; triple AAA in plain vanilla because of the way they have been structured so far—

MR. GALVIS: [Interposing] Can I interrupt you again?

MR. FRADIQUE-MÉNDEZ: Sure, go ahead.

MR. GALVIS: So who's taking traffic risk?

MR. FRADIQUE-MÉNDEZ: This is mostly remaining with either the concessioner which is equity related, or in some cases, with the government as well.

MR. GALVIS: So they're assuring a certain volume of tolls in effect?

MR. FRADIQUE-MÉNDEZ: Yeah, what happens is we have had so far four generations of projects, but this is particularly applicable to toll roads, and there have been varying degrees of this division of risk mostly in the initial stages assumed by the government directly, and then gradually being phased off to either the concessioner or the government or some specialized bonds—

MR. GALVIS: [Interposing] So what will it take—I know I'm taking you—

MR. FRADIQUE-MÉNDEZ: [Interposing] No, no, no—

MR. GALVIS: —off of your presentation but what will it take to convince the bond markets that traffic studies are sufficiently developed that there's enough of a track record that construction costs are sufficiently profiled—

MR. FRADIQUE-MÉNDEZ: [Interposing] No, I think that this is where we're heading, and actually I have a few—one slide where I will cover that briefly but I think you have pointed to a very important issue. We are very mindful of the fact that what we're looking at right now is probably 101 in terms of what we want to see for a structuring. It is a big pipeline of projects properly financed, but that's one of the challenges. Now we'll refer very briefly to that in a few seconds.

A number of floating rate structures for the bonds (significantly low amounts as compared to the international market) and short terms; so this figure here, six years that you're seeing on the screen, is probably duration rather than tenure but nonetheless we're having tenures of around ten years. You will rarely see a 20-year bond in the local market.

So we have over $20 billion—and this is only transportation-related infrastructure projects—the full figure should be around $50 billion or so in the next five years which is a significant opportunity business-wise and market-wise for not only for Colombians but for the region because this is not going to be financed in the local market in any event. So we're advising the natural infrastructure agency together with the World Bank and the IFC as well in developing a basic project bond

structure for the local market that hopefully is going to be financed by local capital market players; just showing you investors, pension funds for the most part, but in reality given the size of the investments it's going to have a lot of international base as well.

And what we're going to have is a challenge that is going to be common in many countries, I think, in the years to come. We want to have an instrument which is sufficiently attractive for investors but at the same time does not constitute a fiscal deficit item. For IMF purposes in particular, we don't want to have Colombian risk involved in the picture because otherwise it will be more efficient for the government to have a treasury rather than going through all this hassle and fee-wise fairly complex arrangement—

MR. GALVIS: [Interposing] Sort of like the government with [inaudible].

MR. FRADIQUE-MÉNDEZ: Exactly, something like that. That is exactly right.

MR. GALVIS: So you prefer to borrow—

MR. FRADIQUE-MÉNDEZ: [Interposing] They will simply go directly to the capital markets, but they also have a limited capacity in terms of fiscal space so to speak. So we want to have projects which are attractive in terms of distribution of risk, including traffic risk as you were saying, Sergio, but at the same time—given this is initial stages in the local market—well-structured so that investors will feel comfortable assuming risk beyond the market standards that I referred to in a previous slide.

So what we have is something borrowed from the Peruvians, a CRPAO concept to some degree, and improved if I may say so, on a number of accounts; particularly to address IMF concerns as to whether or not these would be treated as fiscal deficit. So we have a functional unit, a certificate given by the infrastructure agency, indicating that the given function unit which is part of the full concession is available that complies with the standards and level of service as defined in the agreement; and that will be assigned to an SPV which is going to be the one issuing bonds or issuing any type of debt or even equity related security.

The thing is that this is not going to be backed by the government, but it's going to be assigned on a semi-senior

preferred term which is very unique in this market. And what we're hoping to see is investors seeing that, in practice, risks do exist but are fairly well managed and fairly remote so that they hopefully give will a rating to this instrument which is not that far from what they would consider if this were backed up solely by budgetary appropriations.

And being optimistic and given the sizes of the instrument in here—this is my last slide—what we're hoping to see is some form of aggregator in the picture and this is not unlike what has been used in other jurisdictions for similar purposes where we could be able to have, for all practical purposes, an underlying source of payment which is going to be used either for a direct project bond typical issue or for purposes of creating a securitization program. This is probably 101 in terms of initially being concerned with risks that are correlated to the amount of the budgetary appropriations available; but in addition to that, and given the track records that we already have, and given the experience of four generations of concessions, we believe—and that addresses your earlier comments, Sergio—that commercial risk, traffic risk is going to be gradually being transferred to have an increase in the size of these instruments and also diversification of the risk that will be transferred ultimately to the capital markets in the bond program.

MR. GALVIS: Carlos, I think that's terrific. Thank you very much. It's also fantastic because those of you who follow Colombia know that the whole topic of financing infrastructure development in private-public cooperation, it's something that people have talked about for 20, 30, 40 years, right; so it's really exciting to see this really being affected and it's a real credit to President Santos and his team and also to you all so that's very exciting.

The other thing for those of you who don't follow Colombia, one thing that makes this possible—as is the case with Brazil and Peru that were mentioned—is very early on, unlike the United States, these countries—Mexico is another one who did this—developed a very robust private pension system in lieu of a Social Security system and they've got to put their money someplace. And these long-term, long-tenured assets are a very interesting vehicle for the pension managers but that—

MR. WARNER: [Interposing] Another thing as well, Sergio, about that is that you're allowed then to fund an infrastructure project that gets local currency with local currency—

MR. GALVIS: [Interposing] Exactly, so it takes out the exchange rate risk.

MR. BRONSTEIN: I guess I'll go even further in the case of Brazil. I mean the reason why we have been shifting to a situation whereby you're trying to fund and migrate the finance through capital markets is actually to try to contemplate all the availability of resources from the Brazilian pension funds and shift from a very strict dependency from government bonds, so you're absolutely right. In the case of Brazil, I mean, we are doing all of these efforts in order to try to reach the big pockets of the pension funds.

MR. GALVIS: Yeah, because the other sources are either government bonds or bank deposits.

MR. BRONSTEIN: Exactly.

MR. GALVIS: Neither of which, frankly, are so great for long-term infrastructure financing.

MR. BRONSTEIN: We have in one of my slides this presentation where you can see the bond markets in Brazil, and probably 52% of all the bonds issued are related to government bonds. The other 20% deals with CDs, which are basically certificates of deposit like daily market value, and then only 14% were related to bonds themselves. I mean we call them in Brazil the debentures, so you can see the difference in the gap that you have and I guess the idea here is actually to shorten the gap between the government bonds and the privately-owned issued bonds.

MR. GALVIS: So what I want to do now is to turn it over to Rich and then Troy, and Rich will talk a little bit about the issues that I think Brazil and Colombia are going to—both of them—will end grappling with. One is the issues around the long tenor, the pluses and minuses, and then the issues of the inter-creditor relationships. So, Rich, I think you're going to go first on—

MR. RICHARD LINCER: [Interposing] You know as Sergio said, one of the advantages of the project bonds is that they offer a long tenor for long-lived infrastructure projects, industrial projects. So the good thing is you have a long tenor. The bad thing is you have a long tenor. You're locked into this.

Basically, as Sergio said, the investors in these bonds, the pension funds and the like, want to have that investment. They want to have assurance that they will have it for the life of the bond. So if you go to prepay the bonds ahead of time, there is a make-whole provision that basically attempts to assess the premium over a risk free rate. And it's usually computed as a present value of all the future stream of payments, but it's discounted typically over U.S. treasuries plus 50 basis points. So what does that mean?

As Sergio said, if in 2006 you got a rate of 6%, you were feeling pretty good. Today you're being criticized for that, but if you go to prepay that debt, given where treasuries are close to nil, you're going to have a huge premium that you've got to pay. So you figure fine, rates go back up and then you can pay it off. Your make-whole premium is gone, but at that point if you go out to refinance in the market you're going to pay a premium on the financing thing.

The only time you can get around the make-whole premium is basically if you have the cash to pay it off, but most of the sponsors and the equity we're putting this in are not going to want to leave the debt there. They're not going to want to leave the cash accumulated in the project. It's usually paid out. So it really does lock you in. When you sign on it's sort of a Faustian Pact here that you've got the project bond and you've got to structure it very well going in.

The other thing is even in certain cases where you have unexpected prepayments, tax calls where you want to pay off due to a gross-up, or most particularly upon an acceleration on default, there is normally a make-whole premium paid. And that could really complicate the restructuring because not only do you have to pay and restructure the basic principal amount, but you have to factor in the make-whole premium.

There was an interesting case last week in the U.S.—and this is cutting against my interest as a counsel to project sponsors sometimes—in which American Airlines sought to prepay some equipment trust facilities. And the Court held that they didn't have to pay a make-whole premium because it said that there was no make-whole premium payable upon acceleration. And so the creditors didn't want to get paid out. They said, you know, we're not accelerating. There's a clause that says it's accelerated upon bankruptcy but that's not enforceable.

The court said, oh no it's enforceable. The creditor can do that. You can't decelerate. It's the only time I've seen this in a project bond where they expressly disclaimed the make-whole premium on acceleration, and I can assure you that after that it will never be left out again.

So what is the problem with being locked in for the long term? I think, as Sergio noted, you're trying to predict out 20, 25, 30 years on a project that's fairly complicated. Toll roads are probably easier. To my mind they're the simplest project financing in a way. I mean what is it? You've got somebody with a bucket by the side of the road collecting pesos that people throw in as they go by. It's not that dynamic. On the other hand, if you look at some of the experience in the U.S., which in some ways ought to be viewed as an emerging market from the project finance standpoint, you know both in terms of the state of our infrastructure and the state of the private financing of it, you can see that there can be paradigmatic changes in the traffic functions.

You look at the Indiana toll road where people have moved back to the cities, where gas prices went up, and traffic has declined demonstrably, that project is now looking at a restructuring going and they're going to face the prepayments. You can similarly have the economic changes in ports. Some change like the winding of the Panama Canal that changes where the ships are going, or reduced demands for commodity output.

We had a circumstance where we restructured a pulp mill, and basically what happened was they structured a bond out there and they got totally squeezed because the price of their inputs went up, the price of pulp went down, there was no margin. They couldn't service it.

One way we have handled this has been to build in a flexible amortization which is an interesting structure. Basically you provide for a minimal contract amortization, and as long as you meet that there's no default; but you can amortize on a slower basis and pay a pre-agreed premium as long as you maintain what's called the lower contractual amortization versus the schedule amortization. People know what the parameters are so they can factor that in. It's been accepted in a number of deals in the market. It's something I think that people may begin to look at more to build in that flexibility because

you can see as you're dealing with these projects and the long-lived tenor that you need this type of flexibility.

We did it on a couple of toll roads in Mexico in the 1990s, and I'm pleased to say that both of them survived the maxi-devaluation without defaulting; and given the currency risk and everything else, that was an accomplishment. The other thing—

MR. GALVIS: [Interposing] Rich, just on that, I guess the other technique that I've seen is the sponsors chose to issue up front sort of a simpler version of that. They just issue up front tiered debt with different amortization schedules and maturities, and just sort of take the risk on the shorter amortization schedule.

MR. LINCER: No, that certainly makes sense. And if you think about it from the standpoint of an infrastructure project, one of the issues, Sergio I think as you noted, with the bullet maturities is that you get to the end of the day and you've got to refinance. And if you're at the end of the useful life of the project, you're going to need new financing to rebuild it, so there is some logic to having these amortized.

It's interesting. In the U.S. and again, I find it ironic because a lot of these techniques were pioneered in the U.S., exported for the use in the private sector in Latin America particularly, and now are being reimported to the U.S. now that we're in bankruptcy and our infrastructure is in need of great repair; because we had the good fortune of having municipal authorities that could issue these things and no longer can. But one of the things that always puzzled me until I began to think about it, it was a very interesting technique that took the tiering, Sergio, to really the ultimate degree and took advantage of the yield curve of having serial maturities. So you could have people actually match the maturities they want.

The issue with that versus the flexible amortization is that if one of the earlier maturities defaults or more likely if the company goes bankrupt, you're stuck out with a longer maturity; and depending on the bankruptcy regime you may get a discounted claim whereas if you have the flexible maturity, everyone has the same maturity date, and it's just a question of the amortization being paid. So there are interesting techniques here, and it has to be, one of the things it points up is the need to work with local counsel and to understand the

restructuring regime in the country. You know coming from the U.S. you can't just impose the U.S. structures on the local governments.

So the other issue—and I don't know if the slides got up but you'll see we've got a little fat piggy sort of with a girdle there; I thought the image sort of worked pretty well—is that as you go along, and as I was saying the toll roads are the simplest of these structures; but one of the problems with the project financing using the project bonds is if you're doing an industrial facility, if you're doing a business, it is an organic entity. It will have customer demands. It will have inputs that change, and these covenants which are set day one are often set at a fixed dollar amount. They're set based on what you think you need, but you may have contingencies that come up. You may have an extractive project's inputs. The feed stocks will change.

And Waide was talking about liquefied natural gas. That has bounced up and down in terms of the prices over the years to the point where some projects have been stopped in their tracks, and you need to have the flexibility for that. So there are ways to do that. You can key it to inflation. You can key it to consolidated assets. You may be able to build in some commodity swaps there, but everybody has seen the risk of derivatives and we've restructured a silver project in Peru that just got totally blown up by having the derivatives work the wrong ways. And so that then points out the other issue, and Troy is going to get into this more, but the difference between project bonds and bank loans is that the bonds are much harder to get amendments on. The lenders in a bank loan will always tell you they're tight covenants. We want you to come to us but we can give you amendments. In bonds you have to go out, and depending on how broad the syndication of the bonds, you may have a pure private placement with insurance companies and it's a small group; but if you've got widely distributed bonds, it's very difficult to get consensus. It's very difficult to get a real dialogue with the bondholders.

And the inter-creditor issues which Troy will now get into, and I think it segues very nicely into that, are the things you have to consider; because as good as the bankers and the lawyers and the business folk can try to be ahead of a 20-year or a 25-year tenor, you're not always going to get it right. And you need to think about that as you go into this straightjacket or

this girdle to try and build in this flexibility; because otherwise as we noted coming back to where we started, the inability to refinance this stuff really sort of locks you into the bonds.

MR. GALVIS: Yeah, no, I think that is the perfect segue that sort of so far many, many takeaways but there are two. One is you're making a bet on interest rates, and how you deal with your bond holders as creditors will be different than how you deal with your bank lenders as creditors.

MR. TROY ALEXANDER: What an excellent segue. Thank you very much.

MR. LINCER: We've been working together a while.

MR. ALEXANDER: First, thank you all very much for the opportunity to be here. It is a great pleasure to be up here and to be able to talk to you all. I'm going to do another version of what Rich was talking about: a good news, bad news joke; and that there are good parts and there are bad parts to this. My version of it is to take the last critique that was just made: a very common critique about bonds, namely, their lack of flexibility, and explore how that is revealed in a special case.

And the special case is really built on what Waide was talking about before which is these very, very large energy projects that are multi-sourced financings around the world. Maybe there are some slides there, too. And the question is how is it that you graft a project bond onto a traditional project financing structure, and the solutions to that which I think are illuminated in these large energy projects give you some flavor of the challenges that are there.

The basic solution is through inter-creditor arrangements, which can be so complicated that they make you want to jump off the nearest bridge. I can promise you. All right, so shifting over to the current situation, these large energy projects, which we often called megaprojects, were traditionally financed by debt from export credit agencies and commercial banks. They were structured with common documentation. They had common security. Everybody was pro-rata. And as the projects have expanded, as people have had larger projects, as we've had this capital constraint problem that we've talked a little bit about up here, that sponsors have been looking for alternative sources of capital. Bonds were an excellent option for that for the reasons that a number of people up here have been saying; and therefore export credit agen-

cies, which I'll talk about in just a second, have been seeing either at the beginning of the deal, in the middle of the deal, or while the deal is in construction, finding ways in which bonds are pre-positioned in the financing documents. And that has created a lot of personality conflicts.

The personality conflicts begin with the various institutions that we're talking about. Who are these export credit agencies and what is their perspective? They are quasi-sovereign entities. They are owned directly or indirectly by governments. They have substantial capital. They've been very important in filling financing gaps during the crisis over the last five years or so. They have a long-term political and economic objective. They are supporting exports, securing imports, that's their job. They focus on long-term political relationships, and they have begrudgingly, I would say, learned to co-exist with commercial banks in large project financings. And now they're being asked to co-exist with bondholders, and it's interesting to compare the views between the two folks.

The export credit agencies, and to some extent the banks, are totally about real-time monitoring of projects. Bondholders, they're passive. Export credit agencies, if the project is in trouble, you find a way to fix it. Your best way home is to work out how the project is going to have a long-term viability. The bond-holders can cut and run if there's any type of threat to their return. Export credit agencies have an inherent bias towards solving problems, and the bondholders have little interest in spending the time and money to get that stuff going.

So how is it that one goes about solving this? Quickly, one of the interesting dynamics—and it was referenced a number of different ways in what Waide was saying—is the initial decision to go with a bond in the first place. It has a great deal of deal dynamic to it, but it also often has a very interesting geopolitical aspect to it, because the export credit agencies will have differing views about whether they want a bond in one project versus one in some other sector or some other country.

Mostly these tensions are resolved through other creditor arrangements, and the basic approach is you exclude bondholders to the extent you can subject to rating agencies. You exclude them from decisions that they would not normally expect to be participating in and still preserve a very passive status. I think we're still in the exploratory phase, and the ways in

which we're working these out are individualized negotiations for large projects, particularly the megaprojects.

So what are the big ideas that people use? The first one is you divide up your covenant packages. One structure of covenants, one cluster of covenants is those for the export credit agencies. As Rich was saying, they're onerous, they're bristly, they're heavily negotiated, they're rigid. And then on the other side, you have, for the bondholders, theirs are much more flexible, less onerous. So you divide the documentation such that the bondholders are looking at one package, the export credit agencies are looking at another package, and then you mediate those two through voting rules. And basically you have a series of majority rules as the starting point.

If you start thinking about a majority rule concept, that then means you look at the size of the bond relative to the rest of the debt package. You would see how the export credit agencies would want the bond to be as small as possible to support the idea that they don't have a large vote. And the bondholders and the sponsors who are trying to drive up the benefits of the bonds would be taking a different view.

So another issue that you have on the side of the bond holders is a lack of responsiveness so there is often a guillotine function which means if you don't pony up to an answer, then you're cut out of the decision making going forward. And then I guess I'll stop with what I'll call maybe the beauty of ratings reaffirmations.

You can, when you think about how the export credit agencies look at these things versus the bond holders, there are many decisions that the export credit agencies need to be involved in; how much is a request to put on additional debt for example. Bondholders really don't care that much so the bond holders can be comfortable with a ratings reaffirmation as long as the export credit agencies have their own vote. So you structure it so that it requires both a vote by the export credit agencies in favor of it, traditional decision making decisions, and then get a rating reaffirmation for the bond holders.

So maybe to end on a more positive note, project financing I think as we've been saying and a bunch of us in different ways, these bonds have a long-term future I think for all of us. They are very well matched to the assets. They are very well

matched to these pools of credit that are out there. They are traditionally used in infrastructure in many countries, including the United States. So I think they're part of the future. With that I'll thank you.

MR. GALVIS: That's terrific, Troy, thank you, and Richard, Waide, and Carlos and Sergio. So, Troy, you have kindly agreed to take over from me now. Again I apologize but I thank you all for being here, and as you can tell, the level of experience and expertise of this panel is really extraordinary so I hope you'll have a lot of questions for them and a lot of hard questions for them because there are—

[Crosstalk]

MR. GALVIS: Now that I'm leaving I want to thank you all particularly for indulging me and for letting me participate. Thank you very much.

MR. ALEXANDER: Thank you all very much. So maybe with that, we can open it up to questions. We have a microphone so everybody can hear. And since I have the microphone I can ask all of you all to answer the questions. Thank you very much in advance. Okay, yes sir.

AUDIENCE MEMBER: My question is related to risk. I think that each of the panelists mentioned this in their presentations. It started with Mr. Warner and Mr. Galvis, who discussed how to handle the concerns of creditors before presenting the project to them. And Mr. Lincer also handled the issue during the life of the bond, and I think that is more related to that. How do you see the application of a market disruption clause? For example, a couple of years ago during the time of mining products, the prices dropped drastically, and the creditors were all concerned about that and they decided to somehow consider triggering this provision for either accelerating the loan or maybe changing the interest rate without the necessity of changing the terms of the agreements themselves. How do you see the application of that?

MR. ALEXANDER: Could I ask you a follow-up question? When you say market disruption clause, which version do you mean?

AUDIENCE MEMBER: I would focus more on a market disruption clause that will be related to the volatility of the prices of the products that are underlying the project.

MR. ALEXANDER: You mean one that's built into your project documents that says—

AUDIENCE MEMBER: [Interposing] Yes.

MR. ALEXANDER: —if there's an economic disequilibrium—

AUDIENCE MEMBER: [Interposing] Exactly, exactly.

MR. ALEXANDER: Then that has to be rolled out through the project itself.

AUDIENCE MEMBER: Exactly, yes, more focus related to the aspect of the volatility of the prices that are related to the project. For example, the oil and gas that are in Brazil are very—financings are coming towards oil and gas largely, and mining projects as well. That has been historically very large in Brazil.

MR. ALEXANDER: So how do we solve pricing risk of our product?

MR. WARNER: Well first of all, have the lowest cost producer of any commodity good. That's the number one thing, get the economics right. One of the things I've learned is that the law won't save a bad project. You can't work your way out of a bad project that's bad economically just by papering it correctly. So the first thing to do is make sure that your sponsors know that they have to have the lowest cost producer.

The other way to deal with that and to put that risk on them, which is the appropriate place for it to be, is to say to the sponsors in a market disruption there will be some floor price that you will set, and you'll buy the product at that floor price. So they then take the market risk because they're in the business of managing the price risk themselves.

MR. LINCER: The problem with doing that of course is that one of the advantages of project finance is it's off balance sheet for the sponsors; and if they have an off day commitment, particularly in that period where you have the market disruption, they're stuck with it on their books, but I think Waide is right about having a low cost producer.

Years ago we did a methanol project in Chile which basically could have stranded natural gas offshore in the Magallanes, and so they found a way to bring the gas onshore to use that as a feed stock because they could be the lowest cost producer; and when the price of methanol dropped what we were able to do was restructure it so they deferred pricing basically with an additional cost from the equity developer signal meth-

anol, and they were able to make the project sustainable on that basis.

But I think the one thing is that the bond markets are not going to give you that flexibility. Their view is that their debt must come out of the equity if there's anything like that.

MR. ALEXANDER: Right and I think the question really is whether the equity is committed or seems to be committed; because at the end of the day, the bonds say to themselves this pricing risk is an equity risk. They're not going to let the project go because of the pricing differential, and that works reasonably well, too.

MR. LINCER: And it converts into a question of your leverage. So, to the extent that you have substantial commodity risk—mining projects, project financed all the time—commodity risk out through the roof, but they are leveraged appropriately. If you have, you know, let's pick an easier one, a capacity structured power project, that one can take a much higher leverage because you have a much cleaner, easier fixed rolling in of revenues over the life of the debt.

MR. WARNER: You know, it's typical in the U.S., for example, in the early days of power project finance to have debt equity ratios of one to one. I mean 100% debt finance.

MR. ALEXANDER: Those were keyed, though, to the theory of what they called hell-or-high-water, take-or-pay contracts; and one of the early lessons I got was if the lights are going off, they're not going to enforce it and all of you are too young to remember except the group up here. In 1982, the equivalent today of $5 billion bonds defaulted in this agency in Washington building a nuclear power plant but having the unfortunate acronym WHOOPS – the Washington public power supply system, and basically, nuclear power hit a bump, the plants were never built, and everybody said these contracts were invalid, and of course invalidated them.

So I think the key with the projects—we lawyers take pride in documenting them, and do it fairly well—they've got to work economically.

MR. WARNER: That's why a buying project for example is more like a 60/40, that type, so—

MR. BRONSTEIN: Just one note on the Brazilian scenario. Yes, as you mentioned you have already worked in Brazil. I guess that you have already seen in Brazil what we call the *te-*

oria da imprevisão, which is basically the market-disruptive clause always seen in term sheets. You also have the market flexes, which basically sets forth some precedents or some call options for the bankers to say, "You know what, let's change the rule of the game here because they are setting the precedents for unforeseen conditions." But at the end of the day once you try to shift the finance or the role of the financiers from a more private to a public way to finance long-term projects, I think this is where most likely this market disruption clause will no longer be in effect. At the end of the day, one has to renegotiate beforehand what will be their interest and what it will leave with that and incur any additional rates or additional risk assessment before you make the final decision to go for debt.

MR. ALEXANDER: Next question, please. We've stunned everybody into silence. Oh yes, sir. We can hear you.

AUDIENCE MEMBER: Okay.

MR. ALEXANDER: There it is.

AUDIENCE MEMBER: My question relates to the negative carry problem that was mentioned. What sort of techniques are you using to deal with that problem created by the fact that in a bond transaction you get the money up front, you disburse it as you need it, but in the meantime you have to pay interest on the bonds and you can probably invest it at a lower amount. What sort of techniques are being used?

MR. ALEXANDER: Let me take one of the most beautiful techniques, which is you have something that happens very often in project financing, and that is it takes longer to get the deal done than you expect. There's all this equity that's been invested by the sponsor so it's used to take out the equity and rebalance it. That's one.

MR. WARNER: That's the most efficient.

MR. ALEXANDER: Yep. The others are you put the money in a place and you have to dole it out as quickly as possible. You back end as much as possible the rest of the debt so you're using up your negative carry money before you get to using your export credit. That creates its own problem because you now have non-pro rata disbursements out in a very significant way and that can create inter-creditor tensions of some magnitude. Other techniques I defer to the others.

MR. WARNER: We have used derivatives and, of course, you have to have a credit worthy party on the other side, but basically you take that money and you buy a stream of payments that are effectively keyed to the project payments, project progression payments as it's built. It has limitations. You've got questions about the credit worthiness now of the banks that would otherwise be on the other side of it, but that's one of the ways we've approached it.

MR. FRADIQUE-MÉNDEZ: Well we've had similar concerns obviously with respect to the negative carry cost issues you are mentioning. In the local market we have not had that as a significant problem given the fact that most of the debt we have used so far is used for repaying existing debt, and in terms of take outs it's less complicated from that perspective. However, in anticipation of that being a potential concern, what we have used is a system that is built into the concessions whereby you would have them all divided up in functional units that will be treated as projects in themselves.

So in that perspective you could have tranches in the context of a bond issuance; each pertaining to a particular functional unit that would be as independent as possible from a legal perspective and from a contractual perspective. So you would have them separated and that may contribute to lessen the effect of the negative carry issue that we all know is a complex issue to deal with in the context of project bonds.

MR. ALEXANDER: Yes, sir.

MR. NICHOLAS BLISS: I'd like to make a comment on the negative cost of carry issue. Certainly, in the London market, one bond phenomenon that's worth mentioning in the context of project bonds is basically, what was happening in Europe from about '96 til the crisis, was that there were insurance companies called monoline insurers. They were all U.S. institutions—Financial Security Assurance, MBIA, Ambac— all of them but one went into the crisis because they guaranteed CLOs and CDOs. That was one part of that business. The other part of that business was infrastructure finance.

All the infrastructure stuff was good for them, and basically what these people did was they wrapped and guaranteed the timely payment of principal and interest on bonds and that got you away from all the problems that the panel have described in terms of having these anonymous institutional

holders of bond investors out there who you just couldn't engage with. You can't get them to make decisions and to police covenants and representations, warranties, events of default and so on. Instead the borrower of the issue would go straight to the monoline insurer which was a Triple A–rated institution, and in return for the bond investor being able to go to sleep and never having to make a decision, he would cede all his voting rights effectively to the controlling creditor, the monoline insurer, the Triple A rated entity, and that single point of contact would sort of effectively have the interface with the borrower and the bond holder universe.

But what got me onto that, sorry, was the gentleman's question here—and I think this is what Waide was mentioning—but we used to have GICs, guaranteed investment contracts, which was a derivative instrument which basically you take the proceed of the bonds which you receive in a bullet up front, and you place them with highly creditworthy institutions, which pre-crisis generally in the London market were the monolines—these AAA-rated entities—and they would disburse effectively, they would then manage these investments effectively, and they would commit to pay a profile of payments which met the profile that the borrower or the issuer was seeking to receive. Those instruments are still around but obviously highly rated credit institutions are phenomenon of the past.

MR. LINCER: A good point about the monolines, and again it points to the rigidity of these things, most of the monolines insisted that they were the controlling creditor; and I had the temerity to suggest in some of these things but what if you were no longer paying on your policy or whatever. We were negotiating for a toll road in Denver, and on a Sunday I suggested this, and AMBAC said we won't even consider this, and on Monday they went into receivership. So you have all these bonds out there now where they remain, and we're working on several restructurings where the monolines, despite being insolvent, are the controlling creditor. And so you have a totally perverse situation.

Again these are one of these things where I think all of us should be chastened by the past five years about assuming that things won't change over 25.

MR. WARNER: And I must say I agree with you that dealing with them makes dealing with the export credit agencies seem easy. So they're not friendly folks often times in a crisis.

MR. BLISS: But they were a phenomenon that's missed now in Europe because certain—and to segue very slowly—and I apologize for getting ahead of myself, but in the PPP discussion this afternoon they were institutions which provided a real source of credit, certainly in the London market and in Europe, more so than over here, simply because I suspect P3, etc. was more developed over there at the time. And now there are a number of initiatives certainly running in London, the London market, trying to replace the monolines and effectively the European Investment Bank, which is a European multi-lateral. It is promoting an initiative at the minute called the EU Project Bond Initiative, 2020 Project Bond Initiative, when basically governments are striving to replace the credit availability provided by the capital markets to public private partnerships which went with the crisis, and is also going because banks are constrained in this long-term lending through Basel III requirements. And so there's a real—I don't know if it's principally sort of an old Europe phenomenon—but there's a real credit crunch going on over there, credit availability crunch.

MR. WARNER: The number of bank lenders in Latin America shrunk dramatically as the French banks have all just pulled out.

MR. ALEXANDER: Just one last thing is that all the multilaterals have tried to find products to step in there to be exactly what you were saying before, a credit pump if you will, between a project that has its own creditworthiness, but it's confusing to the type of institutions or persons that are going to binding those bonds, and if you can put it an intermediary, like the MBIA was, between there to sort of siphon through the credit issues and stand in lieu of that kind of analysis, when those guys have croaked the multi-laterals have begun to provide some form of that type of policy.

MR. FRADIQUE-MÉNDEZ: Just a minor comment. In the Colombian initiative that I mentioned we have had many multilaterals interested in participating in that fashion, having some form of role in the monoliner or in the form of the aggregator that I mentioned, but we are very much concerned about that

for a number of historical reasons and references in other markets to similar instruments, but also because we are concerned that having a single part in a number of very different projects with different risks associated to them with different concessioners would create subsidies across projects which are not necessarily good in terms of risk diversification and also in terms of pricing. So we're looking into that alternative and these friends from the multi-lateral community are very eager to assist and we are very appreciative of that, but at the same time given precedents elsewhere we are very cautious about whether or not this would work in the local context.

MR. ALEXANDER: Yes, ma'am.

AUDIENCE MEMBER: Hi. I'm Internal Counsel at Macquarie in the United States. I just wanted to follow-up on this comment by giving our experience as a project developer and sponsor in the United States and around the world.

We actually, when the crisis hit, looked into forming our own monoline and funding it, and we looked in the economics of that and ultimately decided that we wouldn't do that. And so our experience in the couple of years since then has been these issues are not insurmountable. These issues to do with inter-creditor issues on bond and bank financings are not insurmountable if you're a strong sponsor and you're able to corral the creditors together and to manage the voting rights on these instruments. We're at a place now I think in the market where we can move on with those issues.

MR. ALEXANDER: Just to supplement that, I agree with that, particularly the method that you folks and other infrastructure institutions in the U.S. use where you went very quickly to the bond market for a substantial part, apparently the dominant part of your capital structure, and you did it through a bridge structure remarkably effective. If I could ask you a question? Could you amplify at all about why you decided—I guess Warren Buffett reached the same conclusion when he thought about that—why did you guys decide not to do it?

AUDIENCE MEMBER: Well yes, there were discussions with other participants in the market. Ultimately it was a decision about deployment of our own capital because we were looking at investing a substantial amount of our own capital. It was that and at the same time we were proceeding with a lot of different transactions, and we found that there were alterna-

tive ways to deal with the inter-creditor issues and to finance the transactions. We just found that we weren't as dependent as we thought we were which was surprising to us because we had dealings obviously with all of these monolines on a frequent basis.

MR. ALEXANDER: Did you find that you had, through the process of that infrastructure work in the U.S., sort of educated an investor class so they began to understand what they were up against?

AUDIENCE MEMBER: We certainly did. We are often in a situation where we're arranging the equity for a transaction, and we'll invest a lot of our own capital up front and then maybe syndicate or sell it down. So certainly for the equity market we're in that position of educating, and then in the creditor market similarly it was really pushing terms and negotiating as hard as we could.

MR. WARNER: I must say I think it's a very good point that as private equity—Macquarie is a little bit different—but private equity firms start getting into the infrastructure fund space, they've been bringing over some of the techniques that private equity firms use in doing acquisition financings generally which are much more aggressive in terms of inter-creditor relationships and it is transforming the marketplace.

MR. ALEXANDER: Other questions? Yes, a question over here and a question in the back. Yes, sir.

AUDIENCE MEMBER: I think the elephant in the room really is that in all these structures we are all trying to struggle to find somebody who can basically do the diligence, and none of those players, be it the monoline or some of the other players, they basically do the diligence and then the project gets through difficulty, then the expectation is that the creditors takes some of the risk. If you go into the emerging markets, you know a lot of these sponsors basically want the banks as really an insurance against the country risk. And the monoline structure that you're talking about, all of these were mechanisms that you thought that the monoline would be there to make us whole or somebody else. And in a lot of these deals if you go, and some of us have done some very hardnosed studies by looking at the Asian crisis, the Russian crisis, and now in nine times out of ten it was hockey stick assumptions and people knew it. And it was always other peo-

ple's money and somebody would take you out. And I would be interested in knowing where you have been in a number of situations.

[Crosstalk]

MR. WARNER: [Interposing] Well I think that using other people's money is always a good idea.

[Laughter]

MR. ALEXANDER: What your remark reminds me about, I was in our Jakarta office many years ago and what you're describing is what we used to call the welcome to Indonesia speech, right. And the welcome to Indonesia speech was you know, it is what it is, right? — Yea, you want to use New York law, fine, but you're just going to use Indonesian law. The political and economic implications of the investment are obvious so sit down and think about it, and if you don't want to be in Indonesia, go. People who got comfortable with that learned about it, made a lot of good money, and there were very successful projects. A lot of people also had the hockey stick assumption. I am not so sure I completely agree that nobody does the due diligence

MR. WARNER: That's clearly not right.

MR. ALEXANDER: There are a lot of institutions that are extremely good at doing the due diligence, and understanding the risk and taking very sophisticated views on it. There os also, unfortunately, a certain amount of dumb money that comes into some projects and those folks often find themselves on the wrong side, but the idea that certain institutions don't pay close attention to what's going on—I think it's less of a feature of the project finance market than other parts of the market.

MR. WARNER: I agree with that. Bond investors are often times very involved as well because the due diligence is key. As I said, you can't save a project by the papers, you just can't. You've got to understand the economics and that is a diligence question.

MR. LINCER: One of the problems though is the tenor. As good as you may have in terms of studies – these market studies, these predictions – they'll tell you right up front if they're going out 20 years, beyond 5 or maybe 10 years you can't rely on them. But the other phenomenon you're encountering is there is uch a search for yield given where yields re now that you are seeing more of the dumb money come into it, and I

think that the bankers and the lawyers have a certain responsibility to question the assumptions, and point out where they are aggressive, and have either disclosure in the bonds or – I've seen people actually ratchet back assumptions where it was thought they were a little bit too aggressive on a bond deal, and the rating agencies will do that to some degree in terms of the ratings. They don't have a tremendous track record for catching defaults ahead of time; they've missed every big one that's ever happened, but in terms of at least the initial structuring, they tend to be fairly rigorous as well.

MR. ALEXANDER: Question at the back.

AUDIENCE MEMBER: In the last four or five years with the financial situation with many banks, several banks will be liquidating their positions in project deals, maybe the deal is going a little south and they want to free up some capital or they don't have the stomach to go through a credit committee issue on a workout, and you'll have vulture investors come in to buy up the paper at a discount, and this may be more endemic to a smaller project than a larger one because you might not have bonds. I'm just curious what your experience has been, if any, with bondholders selling out in distressed situations to say a vulture investor in trying to get anything done in terms of a consensual restructuring.

MR. WARNER: Well, that's why you have to have good intercreditor mechanisms. In FertiNitro, that is exactly what happened, but the bonds had to basically go along with whatever the banks decided to do, and we very carefully made sure that there would always be at least some banks around. But the bond investors who did invest in that, even though they didn't have any say at the table when the whole thing got – by the way, the FertiNitro project was ultimately nationalized – but even in the nationalization, Hugo Chavez decided he would pay off the bonds as part of the restructuring, and the vultures made a 60% return. So, they don't really have to get in and run it to get their good money. That's one of the reasons they were willing to invest in that, because they knew the banks were willing to work it out so that everyone got paid. So, I think it's very important that you have somebody you can talk to, and it's not the vulture bondholders that you want to talk to.

MR. ALEXANDER: That point that you're making is exactly what worries the export credit agencies that often have 40% of the debt on some of these really big projects. The issue that you're talking about I think is going to be more pronounced when we start doing smaller projects with more project bonds. We're beginning to do a Latin American one and there were no real inter-creditor issues because it was a bank deal that then got bridged to a bond, and now it's just a bond deal. When those things get into trouble, I think they are going to be very much prone to vulture fund behavior that we have seen in other industries as well.

MR. BRONSTEIN: Coming back to the first Brazilian blended experience in project bond finance, there was a project back in 2010 where the company raised R$2.1 billion Brazilian reals into a direct investment from BNDES of roughly R$1 billion Brazilian reals, and the other remaining R$1.1 billion Brazilian reals came straight from the capital markets. The funny thing is that we were working for the issuer at that time, and we called the bankers and said, guys we need two weeks to get inter-creditor agreements sorted out so that we can meet the deadlines. They immediate responded to us and said those were the easiest discussions of our lives because basically we talked to the bank, to BNDES, and they said ok let's discuss – you do whatever you want, all I want as the BNDES bank is that I need to have the sole entitlement to call and accelerate the debt as soon as I want – so there were no real discussions at that time. At the end of the day, once the bondholders become an important source of finance vis-à-vis development or multilateral banks, this will remain an issue to be seen.

MR. ALEXANDER: We have one minute left. Any other questions. Maybe a question from over here.

AUDIENCE MEMBER: I used to work for Japan Bank for International Cooperation (JBIC), and I am just wondering how much the bondholders care about cash flows before their maturity date? Usually, the lenders care about their money being repaid using a debt service reserve account or claw-back scheme, so my question is whether the bondholders try to secure any way of their money being paid at the maturity date using a debt service reserve account or claw-back scheme?

MR. ALEXANDER: The quick answer is that the bondholders in these deals are pari passu with everybody else, and the security is held commonly by everyone. There are reserve accounts. The reserve accounts are for everyone to be paid at the same time at the same level, and the participants are careful to line up all of the payment dates so everybody gets paid as much as possible at the same time.

MR. WARNER: The difficulty of course of using a reserve accounts is really not to pay the banks off. A reserve account is to give people time to fix it, whatever it is. So, you usually have a six month debt service reserve. It's really there not to pay people, but to keep people at bay whatever the problem is.

MR. FRADIQUE-MÉNDEZ: What we have done in the local context is – remember, we were mostly talking about public contract-based project finance techniques – and, what we are seeing – remember we need to have an instrument that replicates to some degree the profile of public debt risk at the end of the day – but at the same time, structurally, financially and legally, it is not to be considered a fiscal deficit associated instrument. So, what we are looking at is an instrument where the bondholders would have a significant amount of risk associated with the instrument directly, but also it would have the benefit of a preferred assignment of the residual amount that will be for the benefit of the concessionaries at the end of the agreement, and this is really the basic contract between the concessionary and the state. So, the bondholders would be benefiting from a residual amount that will be due to the concessionary at the end of the project. But again, the question comes of whether or not a bondholder would actually be giving value to an amount that would be due 10, 15, 20 years from the issue date. So, one of the alternatives we are working on is to have interim settlements of any net amounts due to the concessioner for the benefit of the bondholder to address that potential issue.

MR. ALEXANDER: Thank you. Great, so with that we'll declare victory and quit.