Securities and Exchange Commission Historical Society
Interview with Christopher Taylor
Conducted on April 16, 2014 by William Thomas

WT: This is the second part of an interview with Christopher Taylor for the SEC Historical Society's virtual museum and archive of the history of financial regulation. I'm William Thomas and the date is April 16th, 2014, and we are in Alexandria, Virginia.

So, last time I think we left off just before the adoption of Rule 15c2-12. You were telling us about how the escrowed-to-maturity controversy fed into that. There was of course the 1986 Tax Reform Act, and then the WPPSS report slightly after that.

CT: And, on top of that, there were continuing trade problems going on in the market in the sense that we were confronted – my staff took questions all the time from people in the industry. On a daily basis they would call in: "What do I do about this situation, what do I do about that situation?" And what you repeatedly saw throughout this whole thing was that people did not know the basic characteristics of the security. They didn't have an easy way of going back and checking them, there weren't good descriptions of the security. And, as I think I said last time, the basis for any market is knowing what the heck you're selling, and, by that, knowing what's its description, what's its date, how old is it – what's at stake, if you will, that's part of the characteristic of a security. And so that then coupled to this sort of ongoing problem of back-office trades that didn't settle, or there were problems at the depositories.

And so, all of a sudden, you get to the late ‘80s and you have the WPPSS report, which highlighted the difference between two types of WPPSS securities, escrowed-to-maturity, the continual trade problems, and essentially the board as a whole – it was very widely approved of by the board – said, “Look, we’ve got to have a better system. This is not going to work in the future with retail customers coming down the road.” And there was a very famous letter – a December 19, ’87, I believe, letter – by James Hearty, who at the time was chairman, to the SEC, basically saying, “If you require dealers to send us, or to require that there be an official statement, we will collect the official statement from the dealers, and archive it, and make it available in some sort of computer format that people could go back and search and find out what was going on.”

One of the trade problems we’d often find out about in the ‘80s, and back even as early as when I came on the staff, was situations where Aunt Minnie had bought bonds, Aunt Minnie dies thirty years later, and nobody knows what the heck is in her safety deposit box or what the decent description of it is. And, in order to liquidate the estate or settle the estate, they have to find that out. There was no easy way to go back. So we went to the SEC, and said, “We’ll do this.” We even held open meetings around the country while the SEC was writing 15c2-12, and there was a remarkable amount of opposition to it, opposition from the bond lawyers, which is what really surprised me at the time.

And then I realized that a lot of the market – there were corners of the market, put it that way – that subsisted, and made their markets, and they were successful. And everybody had their little business going on because they knew the securities, and they were not willing to share. In the early '80s, if you wanted, if you saw you had – if Aunt Minnie dies and Aunt Minnie has an Arkansas bond, you had to go to the Arkansas dealers in order to learn about that bond and what it might be worth, and therefore you were at their mercy. Even if you were another dealer in Philadelphia or New York or wherever, you had to go out to these regional things, and vice versa. I mean, I'm not saying that the New York dealers – they knew the New York stuff. And, the bigger the issuer, then the more widely it was known because it was originally sold more widely.

But, lo and behold, what you ended up doing is looking in a market where there were informational monopolies all around there. And essentially what we were doing in economic terms was weakening those monopolies. We also got opposition from Kenny Information Services, and a number of the information services that had got started in the '80s, because they saw that what we were going to do was make the basic information about securities universally available, and, therefore, again, their informational monopoly in the past from collecting this information and making it available to the market and selling – it was their economic advantage and they sure as hell didn't want to give it up.

So, you had 15c2-12, and you also had our companion rule going through at the same time, and people were sitting there going, "This is wrong." We were proposing to get into – in other words, let other people get into other people's business. And I actually remember a great conversation. We knew J. J. Kenny, and I think there were two or three other services at the time who were providing dealers with descriptive information that was the basis of trading, and they charged a pretty penny for it. And one that was coming along at the time was Bloomberg. And they had the terminals, and they were just starting to move into munis, and they had devoted a whole unit in Princeton, New Jersey, to collecting back-information and populating a big database. And, at the time, there were a million and a half different securities outstanding. So, just as we talk about historical research, people had to go do historical research and try to find out what were the fundamental characteristics of these securities: who was responsible for payment, were there call features, what was the maturity. It's basic data that's used, or should be used, to price securities. So these information services are opposing this. But Bloomberg was not out there in the forefront of that. So I wanted to see if we could get a positive letter from an information service that would say, "Hey, this is going to make our job easier."

` So I made an appointment with Michael Bloomberg, who was the actual CEO of the company at the time, and I went up to his offices in New York, and I sat down with him. And I've got to give the man a lot of credit: he saw the economic argument right away. And I said, "You know, you haven't opposed it, this would help your service get off the ground," blah-blah-blah-blah-blah, made the pitch. And he looked at me and he said, "Look, I have invested a lot of money. I'm going to invest a lot more. I'm going to get this database up, and I'm going to be Kenny's biggest competitor." Kenny had sort of the monopoly at the time, Kenny Information Services. They were sort of viewed as the crème de la crème, and Bloomberg was number two, number three, still coming on. Michael said, "Look, I'm going to dump all this money and this time and effort, and I've got all these people, and I will eat his lunch," in effect. And he said, "The problem with what you're doing is that you're going to make entry into the data information – you're going to make it easier for other competitors to come in." And I acknowledged that, and I said, "But you understand that this is the fundamental information that makes trading happen, and you're better off in your platform if there are more people trading," and so forth.

He said, "Look, I'll tell you what. Yes, it'll help me in the short run. In the long run, it might not. But I'll tell you what. I will not write a letter either in favor or opposing it." And I thought, look, the guy understood all the economic arguments at the time – and he did – but the bond lawyers and the issuers and others did not. They were opposed to the idea of 15c2-12, and, coupled with it, the MSRB's collection and the establishment of the database. And the issuers, that, too, was particularly – I have often said to people that that was a nastier, uglier, more hard-fought argument than getting G-37 and dealing with political contributions. The issuers were violently opposed to it.

The Government Finance Officers Association stood up at a public meeting, basically, and said, "Look, you're using technology for yesterday's problem, tomorrow's technology for yesterday's problem." Little did they know that within, like, five years, we were having to change our technology in how we stored the files in order to make them widely available. I mean PDF, which we all use, the PDF format was just getting started then, and we ended up originally storing them in TIFF format. Because you had to – look, it's an interesting sort of historical problem, dealing with computerization. What happens ten years from now when you go back, and you sit there, and you say, "Oh my God, this file can only be opened up on a Microsoft machine running Windows 3" –

the compatibility question. So it's almost like we had to have something that was close to a photographic copy of the documents.

The opposition was fierce. A number of the issuer groups went out, hired my predecessor, hired a former chairman to oppose it, to come out against it. And in fact 15c2-12 went into place, but then our collection of the documents, we had to do it in stages. We were allowed, first, to collect in hard-copy form for six months, but the idea of then scanning it and storing it required another SEC rule approval, and the opposition was just as fierce. I mean, it's like, good God, you know, people were violently against progress in this area.

Now, the issuers thought, well, this is just the first step to the SEC regulating the content of official statements. But I definitely think it was part of the informational – it more stemmed from the need to have informational monopolies maintained by existing parties. They didn't want to see their business models changed, or the way in which they did business change. In fact, I had a bond lawyer come up to me after a particularly contentious meeting, look me in the eye, and say – you know, we were in a coffee break – and he said, "Kit, you realize you're going to change this market. You're going to make it impossible." I said, "Well, what do you mean?" I said, "All we're doing is collecting a public document and proposing to scan it and store it, all at our cost, mind you. There's not a dime out of an issuer's pocket." He said, "No, but, you know, we have these covenants in the bonds," covenants meaning what the issuer has to live up to.

"And we won't be able to just go back and change them because you're –" You know, if I had false teeth they would have dropped on the floor, because that essentially is fraud.

And the individual I was speaking with, who was a lawyer, did not have any concept of how that was, in a sense, a fraud on the investor, and it told me a lot about the character of the market. It was 1990, 1991 – that was in 1990 – and computers were in there. Microsoft was going, Apple was going. And I'm going, "You know, we're getting toward the end of the twentieth century here, guy. It's going to change." And, you know, we got it through, and the SEC got their rule through. And that, to me – it's a huge boon to the market that we're still – it will continue to pay for itself.

And, in fact, one of the people on the internal board taskforce that was responsible for sort of helping the staff, and shepherding this through, and explaining it to the board so it wasn't just staff-to-board but board members involved, was a public member, Richard West. And he basically came up with the idea – we went around to various dealers' shops and explained this. And if you went into a dealer shop at the time, and you looked at their use of their floor space, they had huge libraries of these documents that they used for their own trading purposes – again, the house for the informational monopoly. And he said, "We will be able to justify the cost of the library, and what it will mean over time, just from the reduction in rental cost that each dealer will have to pay. Each dealer is going to benefit more, way more, than what they have to pay for office space.

WT: I guess I have a couple questions. One question is I'm wondering if the issuers in particular were wary at this point. It was only a couple of years after there had been some rather radical proposals around municipal securities in the regulation. In '86, of course, in the run-up to the Tax Reform Act, Bob Packwood had I think suggested getting rid of tax exemption.

CT: Yes.

WT: But then the other thing is, I think David Ruder, not long after that, had looked at getting rid of the Tower Amendment, if I'm not mistaken.

CT: Ruder had made that comment about the Tower Amendment. Boy. Is there a lot of misunderstanding about what's in the Tower Amendment, and it even continues to today. We'll get to that in a minute, but what Packwood proposed, heck, that had been around since '76 – since '69 actually, the big Treasury study in '69 which basically said, "Get rid of munis, they're a burden," and the like. So the whole question of tax exemption, actually, to me is almost a separate issue. I don't think the issuers viewed 15c2-12 or what the MSRB was doing as opening a door to changes in tax exemption. The muni industry, by the late '80s, after what Packwood did, was a one-day savaging of the market. What people saw after that was that Packwood had been beaten back in one day on tax exemption. So they thought, "Okay, we know how to play this game: we'll be wary, we'll watch."

But the Ruder question, when Ruder comes out and says, "Geez, we've got to perhaps have registration and everything else," registration was – let's step back here. Under the '33 Act, that's what gets you a corporate prospectus, and it's timed with rules that were subsequently adopted under the '34 Act, which is the Exchange Act, and that's where we're created. Munis were already exempt in the '33 Act passed by Congress. You couldn't register munis without changing the '33 Act – a huge, huge deal, it could not be done except by congressional action. And I think Ruder was saying, "It doesn't make sense in the modern world." And he's right, but that also put pressure on the issuers to come up with official statements. Again, 15c2-12 said there has to be an official statement. By then the market had figured out there has to be an official statement in order to sell the securities. It had essentially become a voluntary thing, and then to put it into some sort of rule was not a big deal. The only thing that the SEC did was say, "Look, you can't lie in that thing, you can't lie in the document, you can't commit fraud, and you cannot omit a material fact." So the SEC got most of what it wanted, but it knew it couldn't get registration, and the MSRB never thought about registration.

Interestingly enough, the Tower Amendment, for those that read it carefully, says basically that neither the SEC nor the MSRB may require issuers to produce particular content in the document. It does allow the SEC to write a rule for dealers, but we were only allowed – if you remember, the Tower Amendment today, the MSRB, the only thing it could do was put requirements directly on dealers. It couldn't put them on issuers. And the issuers would say, "Well yes, that's true, but dealers, because they are the entry point in the market, you would be able to bootstrap through the dealer community to produce documents."

And as much as we tried to explain that – and I actually had a lawyer sit down, and this was in the late '90s, who was considered one of the big guys in the bond lawyer community, at the board table he sits there and says the Tower Amendment would allow the MSRB to do that. And I said flat out, no, we could not write rules on issuers. We can write rules on dealers. And he said, "You're wrong." And I said, "No," and I flipped open the rulebook, which had a copy of the Tower Amendment – you know, in the front it has the Tower Amendment – showed it to him, and I think he was very embarrassed that he had never really sat down and read it.

So, when you say the Tower Amendment – and there were fears about the Tower Amendment, but I think those were overridden by – quite frankly, people were going to have their actions clearly available to the general public forever, and that was disturbing to a number of issuers. They liked their little, you know, "I have my bond lawyers who are my buddies, I have my dealer friends, and now you're going to allow anybody in the country to look at the deal." Dealers were not too thrilled either, because one of the ways that Wall Street makes money is that it creates monopolies. They create a structure, a new security, a new way of selling a security, and for a relatively brief period of time, a year or two, the firm that dreams it up manages to make boatloads of money because it's charging a monopoly price. Then what happens is there are new entrants. The Street, relatively, gets new entrants in, when they see the structure and they see what Joe has done there, Bob figures, "Oh, well if Joe's doing it, and Joe's making this huge profit on this underwriting or trade, then, very well, I should get into this business and make boatloads of money too. I'll take some of his profits." And eventually what happens is the spread or profit in that type of trade or underwriting gets down to the normalized profit. There's no monopoly profit in that. And, again, when you have an official statement out there, which says, okay, the official statement says "A, B, C; here's how it's structured; here's what the flow of money is to this tranche, to that tranche," you know, where it's all laid out, dealers don't have any secrets anymore on structuring. So it, again, took away people's informational monopoly.

WT: I guess that sort of feeds into my second question, which is that of course in other kinds of securities they're used to operating in a more information-rich world. And so is it the fact that the muni desks were just so separate, and used to doing things in their own way, that that really –

CT: Oh, there's no question about it. There's no question about it. The muni desks saw that they were going to have to enter the mainstream, if you will, and that it was no longer this arcane, archaic little world, that it was coming into the modern age ten years before the end of the twentieth century. And I think a number of them sat there and said, "This is going to make it easier for somebody else to come in and run my shop or do my business, if the information is widely available." And up to now there were people in the shops that sit there and say, "Oh my God, there's no way I'd get into munis, you don't know what's going on, you don't know the people, I've never met the dealer from Arkansas, and yet we run across Arkansas bonds all the time." So, again, it was a community, and when you start to modernize a community, some of the local culture goes away, and that's essentially what was happening in the latter part, in the '90s. 15c2-12 was the lightning rod, quite frankly. It was the thing that everybody saw as the change agent.

WT: Now, a few years later you start to introduce transaction reporting as well.

CT: Right.

WT: Could you tell me about how that got started, because of course SEC had already had its EDGAR system, and it's 2008 before we get the EMMA system, but it begins much before that.

CT: Actually, both 15c2-12 and pricing go back to the rule change that was made, I think in 1979, requiring CUSIP numbers on the confirmation. That is the sort of fundamental building block on which everything came off of. And then, there was always a concern about pricing. The SEC was sitting there saying, "This is an opaque market. You guys don't know what you're selling half the time. You have no way of comparing prices. There are no prices out there for individuals. The individual's going to get taken to the cleaners in this market because of the lack of information, pricing and description."

So, you end up throughout the '80s moving closer and closer to the idea that you have to get a good description, because one of the aspects of the description is what are the call features. Escrowed-to-maturity centered around what were the call features, and were they existing or had they been defeased, had they been removed. And so if you're going to get pricing properly, you have to have the description in the first place so that the emphasis on, in a sense, transaction reporting, is the logical extension of all of this. You get the description first, 15c2-12, MSRB's MISL system is what is was called then, and then you say, "Okay, now we have the description, now we've got to get the price," because that's the other aspect of a fair and free market.

And so we said, "Okay, now we have the descriptions," and the SEC was starting to pressure us again about pricing, and say, "Okay guys, we've got to have better information." That pressure started in 1994, '95. There had been a big market break in '94, in the spring of '94 in the muni market, a big market break. I mean, it's like prices plummeted, nobody knew how much they were plummeting, blah-blah-blah. Everybody was getting excited in the fixed-income markets, and there was no information in the muni market. And the SEC started to pressure us to go back to some of the old proposals that it had proposed in 1977, 1978, even before I came on the staff.

And I knew the handwriting was on the wall at that point. Something had to give. We had to come up with something, and we had the basic building block in CUSIP numbers now, we had the better descriptions that fed into the CUSIP numbers, now we had to get the price. And so transaction reporting, and the idea of getting at least a collection of information, to find out and look at this market. Because, you see, the SEC staff at the time, in 1994 and '95, believed munis traded the way equities traded, and that was just flat out wrong – I personally never believed that. I tried to convince them repeatedly of that, tried to cite information, but there was a paucity of it so it wasn't really easy to do.

So that's when the first set comes, where you collect information and you have what happened the day before. You have some idea. End-of-day reporting gives you sort of the first snapshot of what happened that day. And then in early 2000 we knew we were going to have to move more and more toward real-time, but Y2K and the 9/11 terrorist attacks and everything sort of took a lot of pressure off the board to move to real-time right around the turn of the century and left us with some breathing room to look at things.

And one of the things that was done was that we analyzed a year's worth of trading, and that analysis – I haven't checked to see if it's still on the website, but it certainly was while I was there – was fascinating. It basically said a single muni security in issue – and not the $100 million issued by XYZ, but the individual securities within that issue, the twenty or so different maturities – if you looked at those and you looked at the trading patterns associated with them, you saw that there was a fair amount of trading during the initial underwriting. And then it was a steeply dropping curve to about six months, and after six months it barely traded at all.

You could go for very, very long periods of time with no trading in that CUSIP number. This is really unheard of in the equity markets with which the SEC staff was intimately familiar, and they viewed all securities markets through that equity market lens. And here was the first look at a fixed-income security market, and you're saying, "No, it doesn't work that way here. You have all this trade in the security, and then it evaporates." And one of the other statistics that sticks in my mind is only one-third of the outstanding CUSIP numbers are likely to trade in that year. That means for over a million different CUSIP numbers there are no trades. You do not know what – you can't sit there on a daily basis, or a minute-by-minute basis, and say, "Well, that's worth X." You can't, and it's unreasonable to expect that.

So after getting end-of-day reporting and doing this study, we were able to say, "Look SEC, this market is different, okay? We will have to do things differently in this market." And slowly but surely, we did. We put in the infrastructure and everything else, and a big part of that infrastructure was again the description, making sure that we knew exactly what was being traded and what the characteristics of it were, because if you were given a yield by the dealer, then you had to calculate the price. If you were given a price, you had to calculate the yield. Back in the early – I think it was in the early '80s – we adopted a calculations rule so that we could even standardize that. There was no standardization in the fixed-income markets, very, very little. And if I have to look back and say, "Tell me in a nutshell, what did you do?" You had basically standardized it, we standardized a lot of stuff in the market, whether it's 15c2-12 or pricing.

So, anyway, pricing was an extension of that. Again, moving to the real-time pricing was a very contentious issue, obviously within the dealer community, because it meant that there would be a drop in profits. And although I haven't studied it, and I don't think we really have the data available to study it, I can tell you this much. Talking to institutional customers after it was instituted, and some of the dealers who would tell me over a drink at the bar, there isn't a question that it led to a significant drop in spreads, as much as half of what it was before. Because an institutional investor could see that, say, Goldman Sachs, or Bank of America, or whatever, it had purchased a block of bonds fifteen minutes ago at XYZ price, and then they were trying to mark it up to a higher price, lower yield, and the institutional investor who's looking at these data say, "No, I ain't paying you that much per trade."

So there were a lot of people within the dealer community who saw this as a real problem. We discovered other things subsequent to real-time transaction. Actually, we knew it from the end-of-day reporting – and this was in the mid-part of the first decade of this century – we saw that they were daisy-chaining, where dealer A would sell to dealer B, mark the bonds up, dealer B would sell to dealer C, C would sell to D, and the difference between what A paid to his customer to get the bonds and what D sold it to his customer within a day or two days was a phenomenal profit. You're talking big, big numbers, 5, 10-percent, stuff like this. And the sad part about it is you'd see, the following week, D selling to C selling to B selling to A, and everybody was making profit, and they had this little – that's why I call it a daisy chain, they were passing the securities around as a way of washing out what their individual profit was. Dealer C's profit to selling it to dealer D was not too big, dealer D's profit selling it to his customer didn't seem that big, but dealer D's customer and dealer A's customer are the ones that got screwed.

And that's – really, when you see something like that, then that really argues for real-time pricing so that it cannot be hidden – again, an informational monopoly, pricing information on what a security is worth. Think about it. Let's go back to the Arkansas bonds example that I started out using. A dealer's trading Arkansas bonds, some of them are newly issued, some of them were issued three months ago, some of them haven't been seen in a while, and you see these on the tape. You can search by Arkansas bonds, search by state, and you can look and see what the prices are. You're a dealer in Missouri, a neighboring state. You've never been able to deal with the Arkansas bonds directly. Now you've got information, you can sit there and say, "No, I ain't selling you Aunt Minnie's bonds at that discount." That doesn't make sense given what was sold yesterday, or sold within the last half hour. I now have information that I can sit there and say, "Hey, that's a monopoly price based on monopoly information."

Sorry to put it all in these economic terms, but it's kind of funny. People would come up to me who knew that I had a doctorate in economics, who were outside the industry, and they'd say, "Kit, you're not practicing economics." And I said, "Oh my God, I'm having a blast practicing economics."

WT: As long as we're on that subject, I was probably going to save the question for later, but you are an economist and you've mentioned your economic perspective on this. Of course, there are so many lawyers in this area, lawyers are most of the people whom we've spoken to. Do you have any perspective on being an economist in that –

CT: Oh, I do. And there isn't an economist who isn't painfully aware of law, because law structures markets, structures the way in which we conduct commerce. And what I find highly amusing in all of this, and what I often told people, is here I was running a staff of lawyers, and I would sit there and say, "I'm an economist practicing law, and they were lawyers trying to practice economics." I thought I had the better deal out of that. But, yes, there were lawyers throughout my whole tenure there, not the MSRB lawyers but external lawyers, who sat there and really didn't want to hear some of the economic arguments, because the economic arguments ran contrary to accepted industry practice.

And you have to understand that a lot of the legal work that was done in the muni industry had its basis not so much in the adoption of law, but, even if there was adoption of law it goes back to bankruptcies that occurred in municipal debt in the 1800s. The idea that there had to be a bond opinion. What's the basis of why do you have a bond opinion? A bond opinion basically says the issuer has been authorized, these bonds have been authorized to be a debt of the municipality.

Now I'll tell you an interesting story. One of the things I did at the MSRB, I was looking for stuff to put on bare walls and I happened to be in New York. I read some article about a thing called scriptophilia, which is the collection of old bond certificates and old stock certificates. So I went up to this house, R. M. Smythe & Company in New York, and I started picking through their stuff, and they whipped out a copy of a thing that I'd heard about – and the MSRB has a framed copy of both of them – a thing called Louisiana baby bonds, and they're fascinating for two purposes.

First of all, going to the whole question of bond opinion, the treasurer or somebody in Louisiana back in the 1800s had this brilliant idea, "Look, we'll issue these bonds and they'll be in $5 principal amounts, not a thousand." A thousand was a big number. Even a hundred bucks was a big number back in the 1800s, you know, people didn't have $100. And that represented a lot of wealth. He said, "We'll sell these in $5 amounts." It's equivalent to what people call mini bonds today, which I can get to later. Anyway, $5 principal amount, with little coupons that were as wide as my little finger, that were payable in five-and-a-half cents at the time. Well, the issue size was approximately 3 million bucks, and the thing blew out, the issue blew out. They had no trouble. The treasurer of Louisiana had no trouble selling them. So he got the idea of, "Okay, if there's so much demand for this, let's create some supply." So he personally went out and had the printer print up another 3 million, but he used a different color ink on the back of the bonds. I think his was black and the real thing was green. Anyway, he prints up another 3 million, those get sold and then everybody goes, "Well, wait a minute, gang, these are not legitimate obligations in the state of Louisiana."

So, at the time, just to sort of bring it forward, in 1979, 1978, when I joined the board, there were still physical certificates being delivered, still physical bonds with coupons attached being delivered. We had rules that were very specific about what constituted good delivery, and one of the things that constituted good delivery is that you had to have the bond opinion attached to the bond or printed with the bond. So, that was the primary reason for lawyers being involved in this business, was to prove that these were validly issued bonds. Then, over time, the question of were they a valid tax-exempt issue – there would be a tax-exempt opinion in a lot of the deals that were done in the '70s and '80s. As time went on, and the sophistication of the deals got greater and greater, you had to have a tax opinion to say, "Yes, this looks like it complies with the tax code of the time and would have interest exempt from taxes under the federal law." So, again, bond attorneys – it's a little like title insurance: bond attorneys had made a nice little business of providing bond opinions. And essentially we were – not so much the MSRB, but the times were eroding that local monopoly as well. So the bond lawyers were not happy with change, if you will, standardization and everything else.

WT: Okay. Looping back around, we were talking a little bit earlier about the pricing and price reporting, and that seemed to me a good segue, after what we've just talked about, into the question of yield burning, which came up in the early '90s. Now, I know that the MSRB was not – that it was actually the Treasury bonds that were at issue here, so you didn't have the direct authority to regulate them.

CT: Yes, but I should probably explain what yield burning is. Okay, essentially what it is is that when a bond is issued, a tax-exempt municipal bond – the County of Fairfax issues $50-million worth of bonds to expand its park or its library system, that money is not going to be put to use right away. There will be a period of time where that money is essentially held and invested, if you will, until the proceeds are actually used to build the library. Because you've got to get all the permits, you've got to do this, you've got to do that, the money ain't going out the door the first day. So the reinvestment of bond proceeds: dealers had to do that for issuers, they had to figure out a way, "What can I do?" And actually dealers got very, very creative, because they took this money and they had to find a way to maximize the amount that an issuer could earn under IRS rules. IRS rules and Treasury regulations specified exactly how much money could be made by arbitrage – they were called arbitrage rules – so that they didn't want the County of Fairfax to issue $50-million worth of bonds at a tax-exempt rate of, then, 4 or 5 percent, turn around and invest it at Treasuries at 8. They didn't want Fairfax to be making free money at the expense of the U.S.

So the IRS basically says you cannot earn more on your escrowed funds, your proceeds cannot be earning more than what you issued them at. But, in that calculation of earnings dealer profit is treated sort of like, "Okay, we understand that dealers have to make a profit out of this." So, what the dealers did, and took it too far, is they'd say, "Okay, we'll go out and we'll buy an 8-percent Treasury, and we'll sell it to the issuer at 5 percent." That's a gross exaggeration on my part, but they had huge markups, way, way in excess of what Treasury bonds, the most liquid fixed-income security, traded at. So if you and I were trading Treasury bonds or Treasury debt, equivalent Treasury debt, what we would be getting, you know, very, very thin spreads where the spread might be measured in 32nds or 64ths. Very, very narrow, because it's a liquid market, lots of participants, very simple security to trade, the description is very simple. So it becomes this sort of gold standard on which everything else is based, but the spreads are very, very narrow.

Well, what the dealers would do was they'd buy a long-dated Treasury bond, mark it up to the point where it would meet the arbitrage rule and the use of proceeds, and they would make an outsized profit. And they all got involved in this business, because a) nobody was looking at it. There was no way to rationally look at it. There was no price reporting in Treasuries. There was no audit trail in Treasuries. If there was one, the New York Fed, which was overseeing the market, wasn't sort of sharing it with anybody. Anyway, the upshot of it was that dealers were making outsized profits in the reinvestment of the proceeds of a bond issue by marking up Treasury bonds above what was required by the IRS. So the IRS figured it out and clamped down, and the industry paid, I think, close to $500 million worth of fines associated with this, and the practice was very sharply curtailed. So, that's really the whole thing with yield burning.

It was pretty common, and issuers knew what was going on. Quite frankly, a lot of issuers knew that yield burning was going on. They closed their eyes to it because it was no skin off their nose. It was skin off the Feds' nose, off the Treasury's nose. The Treasury wasn't going to collect the necessary information for tax revenue and the like. So, an investigation, large fines, arbitrage regulations tightened, and everybody goes, "Okay, can't play that game anymore." It did give the industry a black eye, though. You know, we had political contributions and then we had reinvestment of bond proceeds. By the way, I mean one reason the issuers didn't complain about this is because the dealer would walk in and say, "I will underwrite your bonds for nothing, I will take no management fee," because he knew he was going to make it up – "as long as I get the right to reinvest the bond proceeds." And so, from an economic standpoint, dealer profits shifted from the regulated side of the market to the unregulated side. I had no control over Treasuries. SEC didn't really have any control. The Federal Reserve was saying, "Oh no-no-no, we need that market, don't regulate it."

WT: Let me turn from the market to the SEC and their interest in municipal securities and their regulation. We talked a little bit about David Ruder. We're going to be talking with Elisse Walter and Rick Roberts. Of course, there's Arthur Levitt and the Office of Municipal Securities. What did that look like from your side of the fence?

CT: Well, let's go much further back. Let's go back to the creation of the board, even before I came on the staff. This was the first segment of the fixed-income markets to be regulated. And the person who was my predecessor, and who was general counsel, Frieda Wallison, actually had been working at the SEC and was hired out of the SEC by the original board to be the general counsel to help write the initial set of rules. I dealt with a woman named Kate McGuire, and Bob Colby, who's now in private practice, I think with Willkie Farr, or – oh gosh, they've merged so many times now I can't even be sure exactly what the name. But Colby and Kate were the two people that I dealt with probably for fifteen, almost twenty years out of the whole period of time.

And they had a real interest in munis because they saw that here was a very unique regulatory body, where you had dealers involved, you had some public members, answerable to the SEC, and it was self-regulation, and we were providing them with information. We were explaining a fixed-income market to them. And I think I said in the last session that when we adopted putting yield on the confirmation, Kate McGuire came over to my office and said, “That’s a fraud.” And I said, “Wait a minute, Kate, stop. Let me explain.” So, there was education going back and forth. I was trying to understand why they were pushing us to do A, B, or C, because of the equity market focus, and I was trying to come back to them and say, “Whoa, you know, slow down, guys, this ain’t the equity markets. It doesn’t trade that way, it isn’t designed that way.”

I mean, I hate to pull it back to economics again, but I can describe an equity security simply by saying IBM. And then over at the SEC there’s all these documents that IBM had to file to show its current economic status and exactly what was going on. That equity security is the world’s simplest security to trade, because everybody knows what that represents. It doesn’t have call features, it doesn’t have a varying maturity, it doesn’t have difference of funds that can pay it off. Fixed-income securities are very different, and munis are probably one of the most complicated, up until the creation of the mortgage-backed securities market, which we will not get into.

WT: All right. So then proceeding through, at the highest level, what was the evolution of interest?

CT: Relatively low until – because we were trying to do things. The organization was moving forward throughout the '80s. I mean, we put in all of these rules, we put in automated clearance and settlement, we were trying to do stuff, and I think they saw that progress was being made by this industry-led group. Why interfere with something that's going positively? You know, as long as it seemed to be moving in the right direction, you're fine.

The first big problem was WPPSS, because the SEC had to answer to Congress about WPPSS. They had previously had me answer to Congress about New York City, because the New York City financial crisis occurred simultaneously with the creation of the board, and then the SEC did an extensive report on the New York City financial crisis. Which, by the way, was cited in the WPPSS report, both of which were cited in the creation of 15c2-12, which is that you have to have the basic information about what's going on.

So the SEC did not have that much interest, if you will, from the chairmen of the SEC or from the commissioners until about the time of the WPPSS Report in '88. Then they were on the hook to Congress. And, if you think about the events, you have '88, you have the WPPSS report, they start doing 15c2-12, and within three or four years you have stories coming out about political contributions in the muni market. And Arthur Levitt gets involved, and it's intimately involved in one of his hearings. He says, "I'm going to deal with it." We had already announced that we were going to deal with it. So we had a lot of interaction with Levitt. Now, I think if you interview Levitt, he will mention David Clapp who was one of the chairmen at the time.

WT: I'm talking to him on Monday, actually.

CT: Who, Clapp?

WT: Clapp.

CT: Yes. His predecessor was a guy named Skip Fish, who was a public member, and Skip was chairman during the period of time from September of '92 to September of '93. In September of '93 David came on as chair. And I think the industry, and certainly the board – and I was very fortunate to have those two backed up against each other, because Skip talked as an investor public member, and then you have David representing, in effect, Goldman Sachs. So here's a big dealer, okay. And David knew Arthur Levitt from Democratic politics in New York, so there was an ability to discuss this.

And so, when Levitt got involved, there were lots of conversations back and forth. Political contributions are a big deal. There were meetings down there, Levitt orchestrated meetings. Levitt orchestrated a very interesting meeting, which I don't think has been repeated ever. So, lo and behold, Levitt is trying to get a voluntary initiative, because he was worried that what the MSRB would do, and even if the SEC approved of what we did – they have to go through an approval process – if we did something and the

SEC approved it, he thought it would be declared unconstitutional, or that there was going to be a strong likelihood that it would be challenged on a constitutional basis and possibly overridden.

So, he started a voluntary effort to have the large dealers agree to limiting political contributions. He called a meeting of the heads of the largest dozen firms. David and I were invited to that. It was remarkable, because as you walked into this room everybody had to sign in, but they didn't look carefully at what they were signing in to, which was agreeing to the voluntary document, the voluntary disclosure. They all sat around the table, I mean literally CEOs of these twelve firms, and I don't think there's been a meeting of those guys at the SEC since, all at the same time. So they all sign, Levitt gets the signature, walks in, fifteen, twenty minutes after we're all sitting around the table, he says, "Thank you all for signing."

WT: So what do you think was the main impetus behind the creation of the Office of Municipal Securities?

CT: Oh, I think that was a recognition that things had gotten more and more complicated. Arthur thought there should be more attention on the market. He was familiar with it. His dad was one of the big issuers. His dad also got a lot of political contributions, according to the dealers that I talked with. But he was treasurer of the State of New York, and he controlled a gigantic pension fund, and he was intimately involved in a lot of debt issuance, so Arthur not only knew it from his father, but he was one of the founding partners of Cogan, Weill, Berlind & Levitt, and they had a muni department which at one point was headed up by a guy who was my second chairman that I served with, Peter Trent.

So Levitt had a lot of intimate knowledge about the muni market. He knew damn well, and his testimony is worth reading sometime, because he stood up and he had some great lines like, "I couldn't find a price for my mother's bonds." Stuff like that, that was very, very powerful. Post the financial crisis, Levitt testified, once he left office, and he labeled the muni market as predominantly corrupt, not because of what the MSRB did or did not do, but because he recognized that a municipal bond transaction – the bond issuance and the trading of bonds – when he testified in 2009 or '10 was regulated, but there was this huge part of the industry that was unregulated.

By then we had the use of interest rate derivatives, interest rate swaps, which is a long story but is really the successor to yield burning. People found out they couldn't make profits in yield burning so they started doing interest rate swaps, and to this day interest rate swaps and the profitability to dealers in interest rate swaps is hidden from the issuer community, and the issuer community has been saddled with these swaps that last thirty years. And Levitt knew this, so that when he was testifying he was really testifying not so much about the bond issuance, which was regulated, the actual bonds, but the other part of it, which is all the unregulated financial activities dealing with state and local governments.

And I think probably it's an appropriate thing, since you're going to be talking to all of these guys – and ask David about this, he has a longer term perspective than I do – when I came on the MSRB board we were having a good year. There was $40 billion worth of bonds issued. When I left, $400 billion were being issued. When you look at the Federal Reserve's flow of fund statistics over the same period of time, you see not just muni bonds, but you see the huge flow of dollars, financial transactions, through the state and local sector. Not only were they issuing more bonds, pension funds were exploding at the state and local level, tax collections, growth. I mean, face it, the '60s, '70s, and '80s, let alone the '50s, were great times. State and local governments, and the roles in which they had to play, were growing very, very rapidly, way faster than the regular economy. People don't realize – and people extol Reagan, well, what Reagan did is he took a number of the federal functions, and he said, "Okay states, you handle them. So, taxes went up, and revenue had to keep up with it. The flow of money through the state and local sector became so large that, you know, flies to honey, if you will. People started looking and saying, "Okay, maybe we should get into the pension fund business, maybe we should get into this aspect of the muni market, or whatever, in order to make money handling this."

The sad part about all of that is that the sophistication and compensation of state and local officials who are responsible for dealing with these very large sums of money ain't nowhere close to what Wall Street pays for financial knowledge. I mean, there's a huge disparity there, and the disparity is not just compensation but it's the volume of transactions. You got people who don't have as deep a background in finance dealing with very, very large sums of money. I mean, it's sort of a joke, to my way of thinking, that somebody runs as treasurer for the State of California or for the City of New York. Come on. You're asking the populace to judge this guy's qualifications to handle these volumes of money? You know, let's get the sophistication of the state and local issuers up there, because the gap has grown huge between the two. The average size of issue goes up, and makes it much harder. The local guy, he ain't getting paid a lot more. The guys in New York are getting paid a lot more. So, those differentials create problems down the road.

WT: I was in New York last week talking to Peg Henry about some of her experiences working with the City of New York and how sophisticated the municipal funding mechanisms there could be. But then of course, there are all different sizes of municipalities.

CT: Yes, there are, there's the obviously real small ones, and there's obviously the very big ones. And the very big ones may have put in systems and have people on the staff level, God bless them, who have the financial sophistication to deal with these things. But you're talking about up to 50,000 different issuers in the country? I'm sorry. The education is not up to that. Heck, look at your background, look at my background, or look at what we went through in high school. You know, how many courses did you have on dealing with personal finance? I didn't have any, you know, and I learned it at home. And it's gotten a whole lot more complicated as life has gone on, and I daresay yours has too.

WT: Yes, indeed. So maybe we can talk a little bit more about just some of the products that are out there, and the MSRB's variable authority over them. So, for example, there are mutual funds that focus on municipal securities, which you don't, there's the auction-rate securities, which of course became very controversial.

CT: The legislation creating the MSRB sharply limited the bounds in which the MSRB could operate, and it was a constant frustration to boards. I mean, when interest rate swaps started to become a big deal –

WT: When was that, about?

CT: Oh, the IRS will tell you it was the day after they signed the yield burning letters, the settlements with the dealer community. But it really took off right around the millennium, the first decade of this century, to the point where dealers were coming to the board table saying we have to do something about this. Now, that created one of the first – and it certainly continued while for the balance of my tenure on the staff – created an imbalance between regional dealers and New York dealers, because regional dealers did not have their credit ratings or the connections to be able to offer their issuer clients a bundled package of bonds and an associated interest rate swap, the auction-rate securities and the like.

So we could regulate the auction-rate security, but we couldn't regulate the swap. And all the money was being made over in the associated swap, and the only people that really could do them were the largest dealers in the country, so the largest dealers were grabbing market share at a great rate from the local dealer community. And so I'd go to a board meeting and I'd sit there and say, "Okay, I've got five big guys and five smaller guys represented on the board," and they were at loggerheads. It wasn't bank versus security firm or anything like that. It was big versus small, and it was nasty. I mean, the local guys were all sitting there saying, "Find a way to regulate swaps, find a way to regulate swaps, Kit," and pushing me quite hard, to the point where I actually had to take a chairman and sit down. That person was saying, "Okay, we're going to lobby Congress. We're going to get this changed." They recognized the argument that swaps were not a security.

So I said, "Okay, I'll arrange a meeting with a very well-known lobbyist who has a lot of experience in the financial services practice." That chair and I went over there, sat down with that lobbyist, and that person said, "Look, there's no way it's going to happen." He said, "I have been on this issue for almost twenty years at the behest of the biggest firms on the Street to make sure this thing is not a security, not subject to the SEC's jurisdiction. It ain't going to happen." There's too much money on the other side from the large dealers, from people who were involved in the interest rate swap market. And, unfortunately, the chair did not want to hear that or accept that answer.

And it's sort of sad, but that's what the deal was. I mean you had Phil Graham in the year 2000 passing legislation in Congress, the Commodities Modernization Act of 2000 or whatever. It was the reauthorization of CFTC, and in that specifically saying swaps are not a security. Interesting story. And that was 2000.

WT: And that of course applied to derivatives in general?

CT: All derivatives, yes, all derivatives, but essentially interest rate swaps were the product that was being flogged to municipalities. But if you'd asked any issuer, large or small, whether that was a security, they would have sworn on a stack of Bibles it was. And as proof of that, I sat down with a person who is now heading up the fixed-income department of a major mutual fund family, and I made the statement that swaps were becoming a problem, swaps were not a security, therefore the rights of the purchasers was not what you'd expect under SEC rules. You had to go to court. And the swaps industry had made very clear that these things were contracts that could not be broken, and they had litigation that dealt with that kind of thing. That individual looked at me and said, "You're crazy," and he got very, very angry with me. He said, "I trade this stuff every day." I said, "I don't doubt that you do, but you're trading contracts. You're not trading securities. Former Senator Gramm has made absolute sure they're not. You don't have any protection from the SEC on this one." And, I mean, very angry, and finally his lawyer, one of the lawyers for the group, said, "Sir, Mr. Taylor's right. These are not securities." He stormed out of the room after that. And I'm sitting there going, "Oh my."

Here are supposedly some of the most sophisticated people, taking an instrument and thinking that it was a security when it was not.

So, the limitations on the board – can't regulate mutual funds trading in munis, can't regulate anything other than the bond issuance and the trading in bonds, and I think the board's done a very good job of that. The problem is that a lot of the stuff going on is outside that realm. It's an inability to look at the total picture of municipal finance.

WT: I don't know if you have anything to add, but I was talking to Ernie Lanza about the 529 plans and how they in fact did come under the board's jurisdiction.

CT: Oh yes. Ernie, God bless him, he did a magnificent job sort of spearheading the staff's effort with 529 plans. But there again, it's a quirk of the law. I don't think anyone, including us, really expected that they should fall under the same set of rules, so the rules had to be modified to deal with them. The rules had to be adjusted to deal with them. I mean, somebody comes to you and says, "Hey, these are your babies." You don't have any choice. You've got to deal with it. I mean, there were board members at the time who said "No, we're not doing this." And I said, "Uh, you want a letter from the SEC saying get off your butt and do it? Because you've got one."

WT: So let's see, should we go back and talk about the evolution of electronic disclosure, the NRMSIR system and all that, or is there something else that might be more natural to talk about at this stage?

CT: Let me talk about NRMSIRs. Let me talk a little bit, because up to now everything I've talked about is dealing with sort of the basic description, the trading, the pricing, and everything else. As I said in the previous session, you go into a supermarket today, you get all the nutrition information, you get a description of what it is, it's a bag of Cheetos, it doesn't have anything good for you in there. (Excuse me, Cheetos.) Usually stamped on the packages, best by a certain date, meaning you get a freshness idea. One of the things that was clear, and it came out throughout the '80s and '90s: "Look, we need more current financial information from issuers to know what their financial status is." And certainly the developments of the last four or five years, where we've had problems in California and Detroit, Puerto Rico, where financial stress has developed post the financial crisis, show the need that secondary market disclosure is much, much more important.

The SEC made a miscalculation, the staff did. The staff member did not understand that, the way Tower worked, and the way it bore upon our collecting the official statements, was the SEC said there had to be one, and then we could pull it from the dealer. They thought that they could establish a similar system, that they could pass a rule and that we would be able to pull the stuff from the dealer community and establish a secondary market database. And the way they structured the rule, it was not possible to do it. It was impossible to do it, because the dealer was not getting the information. In an underwriting there is a primary dealer, there is a lead underwriter, and I could write a rule that dealt with that. Under the secondary market disclosure thing, there's nothing that said, "And the issuer shall give the information to XYZ dealer and allow the MSRB to collect it from that dealer." They thought, "Well, if we say there has to be NRMSIRs and all this other information, and eventually the MSRB will be able to pull…" No, no way to do it.

And so the NRMSIR business, issuers thought "Okay, we can control something now. We'll have a competitor." It died of its own weight, in some ways. Secondary market disclosure is still a big issue as far as I'm concerned, until there is some sort of standardization. And I proposed the thing – in fact, it was proposed in our testimony in 1993, more than twenty years ago – it was proposed to have the following system. Tell me what a standard of good disclosure is. Go to the National Federation of Municipal Analysts and ask them, whatever it is. Create a committee of issuers, analysts, investors, and say okay, here's the gold standard. Okay. And then, if an issuer meets the gold standard, and sends the information to the MSRB voluntarily, we'll put on the confirmation, allow the dealer to put a checkmark, a green light – this was called the traffic light proposal. A green light: this is an issuer who has filed regularly quarterly reports meeting such-and-such a standard. And then you'd have the issuer who said, "Well, you know, I don't agree with that standard. That's too much. I'm a small community. You wrote that standard for New York City. I can't meet that standard, for whatever reasons, and I'm not willing to do that. And I can't do it on a quarterly basis. I'll do it every six months." So, okay, he's providing disclosure, but it doesn't meet the standard. So you put a yellow light on the confirmation to warn the investor, there is some information available but it doesn't meet a standard. The third one is the red light, or the skull and crossbones. This issuer has said, "Screw the investor. I'm not providing you with any information. Anything you get, you're lucky to get. And I'm certainly not sending it to that dastardly organization, the MSRB. I'm not letting it be centralized." So in effect, the red light/green light/yellow light proposal proposes a system that is entirely voluntary on the part of the issuer. They can decide how much and how far they want to go. And it would have met – because the investor would have been warned. The investor sees the yellow light, sits there, and says, "You're going to give me a little more yield, man, for me to buy this deal."

And the issuers kept saying to us, whenever the issue of secondary market disclosure came up, "I would provide it if you can show me where there's a price differential." The traffic light proposal does precisely that. It highlights the differences in disclosure and allows the market to determine that there's a price differential. Unfortunately, that proposal would take a lot of courage on a lot of people's parts, both the MSRB and the SEC, to implement it. They would have to be willing to withstand the same type of criticism we withstood in 1990 in the creation of MISL collection, 15c2-12, and everything that went along with it.

And that is a sad but unfortunate thing, that today we don't have a system of secondary market disclosure. One of the things that I had to do very frequently in my job, several times a month, is I'd get calls from reporters, from Augusta, Georgia, from Madison, Wisconsin, to Bend, Oregon, or wherever the heck they were at, where the reporter had seen something about the muni market and it didn't seem right and there was controversy in the local community for whatever reason. They would call and they would say, "Okay, where's the secondary market information, where's the prospectus, where's the 10-K, where's the quarterly filings?" "You know, it's not required." "What?" How big is this market? Two-point-whatever it is – I don't know what the latest number is, 2.6, 3.2, I don't care, trillion dollars – and you still can't find out this information in 2014?

The flip side to that – and I am enough of an economist and enough of an analyst to look at it – the flip side of that is the security doesn't often trade after the first six months. But what about the poor schnook who wants to trade it, or has to trade it five years later? How do you find out what the real story is? How much is it really worth? Aunt Minnie gave me these bonds in her will, how much do I really have here? And that's a problem, to me.

WT: Are the rating agencies dependent upon this same system of disclosure, or did they have a role to play in this whole process?

CT: The rating agencies, typically, in order to get a rating, require certain information to be constantly forwarded to them. One would always hope that they looked at that information and carefully evaluated what their ratings were. At the time, 2006, 2007, when I was still on staff and subsequent to that, it's pretty much come out that the rating agencies – they didn't look at that information quite as critically as they should. Moody's, if you read their ratings carefully, said that it's the probability of default. Well, that's great. That basically says, if you go to the supermarket, again using the supermarket analogy, and you buy XYZ product and it's in a paper bag, if you open up the paper bag, what's the probability it's going to be rotten in there, that the thing, you look down and it's got mold growing on it. And that's what they were judging. They weren't judging, "Is this a sophisticated issuer who's got all of the bells and whistles and parts in it?"

They started to change their ratings, and I don't know how far they have gotten deeply into that process, or consistently. And that's really for market people today to judge, whether there has been enough change to recognize that those ratings reflect that. That being said, if you read carefully – and I'm sure Moody's, S&P, and Fitch are doing it today – if they don't get the information from the issuer that they were expecting and they pull the rating, well, what's that mean? You know, it leaves the investor in somewhat of a sense of limbo at that point. Should they sell the bonds because the rating was pulled, because they couldn't afford to pay or they didn't want to pay the fees to the rating agencies? I don't think it's a particularly good system, personally, because the information isn't there for all to judge.

In the corporate market, hey, if I don't want to rely on Moody's rating, it's my tough luck if I don't bother to go look at the SEC filings. You can get it all there, and that's what the rating agencies were relying on in the corporate market. But in the muni market, it's a little less clear. Moreover, let's take Puerto Rico, a current situation. Puerto Rico says, "Things are coming around. We got our $3 billion. We're going to succeed in righting the ship and having a more balanced budget, and dealing in a sophisticated way with our budget and financing problems down the road." Okay, what's going to be the regular flow of information we're going to see from Puerto Rico, and can we rely on it?

One of the things that I saw during my tenure as the executive director is that when the issuer got under stress, all of a sudden the information dried up. You had a hospital in distress, you couldn't figure out how many beds were being filled, you couldn't figure out what their reimbursement rates were from the federal government, how delayed they were, all kinds of essential information – gone. And that really leaves the investor holding the bag. And the MSRB was originally created to protect investors. The legislation was, in effect, slightly modified in 2008 to reflect issuer concerns.

Issuers and investors are on the opposite sides of the table, and so I find it a little hard to accept the idea that you have issuers having just as much influence as investors do, with the dealers in between, because, you know, who are we protecting and why? The SEC's original mantra was not to protect the corporations, not to protect the stock exchanges, but to protect investors. And I still adhere to that, from the simple point of view of minimal regulation. I know it sounds funny, but I think, because I was a regulator all my life, that people think, gee, I am pro-regulation everything. Regulation has its time and place. We just went through the whole thing with secondary market disclosure. I can understand why some small issuers wouldn't want it. By the same token, I can understand where investors are coming from. And I personally think they're the ones that, at the end of the day, if you don't have them coming to your market and willing to invest, that market's going to die and it's going to die quick. So it isn't going to take very much to destroy the market if the investor loses confidence in the information that they're getting.

WT: On those occasions when the SEC decides to pursue an enforcement under the fraud provisions, what, if any, is the role of the MSRB in that process?

CT: We have no role, no role at all. We have no prosecutorial role at all. We have provided education, if you will, to the SEC enforcement staff. They have come across a situation, or they think they see a situation that doesn't smell right to them, and they would ask us, "How does that fit with your rules, where does it fit, where does it not fit?" And so we played, again for the SEC staff, an educational role, a bridge, if you will, to tell them about the market, that hopefully they could trust as being an as unbiased as possible view of the market.

We were often criticized as being a toothless tiger because we didn't enforce our own rules. Personally, I think that, having worked at the Fed for five years – and I often said that – I like the separation, because if you're a prosecutor or you're somebody enforcing rules, you want stuff that says, "Oh, you crossed line X, therefore, you are guilty. You crossed line X at 60 miles an hour, therefore, you go to jail and never get out," kind of thing. That's what the enforcement view of the world is. They want something relatively easy to examine, relatively easy to enforce, relatively easy to present to other people as a bad thing.

The world, and particularly the muni world, is not designed for that. You cannot have New York City and the State of California issuing bonds and treat them the same as Peoria, Illinois, or Springfield, Illinois, or Danbury, Connecticut, or any small community, and say the rules have to be universal. But that's what the enforcement people want. That's not what's necessarily good for our market. And I tried always to sort of have that view of "Hey, wait a minute, don't get yourself too deep into the enforcement here." Because at the Fed, they'd write a rule that says, "Okay, you cross the line, you're dead." Okay. It was real easy, and it made the whole enforcement mechanism that much more easy to administer, easy to have run, but it ain't necessarily the right way.

WT: So then when you have a big case like Orange County or Miami or something like that, is there a reaction effect, in terms of what rules you might be making?

CT: No, there were very few instances during my tenure where I thought that there was a public enforcement action or the like that required the board to act. The WPPSS report said – and we've gone through that, there has to be a change, some of this stuff, people didn't know what was going on, they didn't know what the security was that they were being sold and there had to be changes in the condition of the market. So therefore, there was a response. It was a very delayed response because the WPPSS report came out five years after the default.

The one place where we did react to current events, if you will, was the election of the New York City treasurer in the spring of 1993, when it clearly looked like a political contribution was being paid off by awarding a bond deal to the firm. People knew that that was going on. There was agitation in the board to deal with political contributions back in 1990, 1991, but it wasn't until it hit the paper. I mean, I saw a headline in the paper and I read a couple stories, I said, "That's it, we've got to take it to the board at the next meeting," which was a May meeting, and say, "We need the authority to go look and see what the heck we can do." And I think that was really the only clear instance where we reacted.

The board took a lot of criticism in several instances where enforcement action was taken against a dealer for violations of G-37 and people thought it was too draconian, that the rule was too draconian. The board looked at those instances and said there's no way that there's going to be a change in dealer behavior unless it is draconian, and so that was sort of what I would call a reverse action to the thing. I can't speak for what's happened in the last seven years with regard to the bankruptcies and defaults in other parts of the country, but I should think that that does highlight, once again, the need for secondary market disclosure to be regulated or regularized in some fashion.

WT: In the rulemaking process, we were talking a little bit earlier about the role of the MSRB in educating the SEC, and one of the things I'm trying to tease out is the relationship between the organizations. I was talking to Martha Haines about how it was Market Reg and not the Office of Municipal Securities that reviewed the rules while Paul Maco was there, but then her office got cut down to size and put under Market Reg so she was actually able to have more input into the process in that. So under Market Reg, I guess –

CT: I would have to say I never drew those kinds of distinctions between the Office of Municipal Securities being under or not under the division of Market Regulation. The issues at the time that we were dealing with – which was political contributions, the fallout of G-37, G-38 on consultants, those things – it didn't really matter who we were dealing with at the staff level because this stuff was going to end up at the commissioner's table and it was going to be a big deal.

Real-time transaction reporting, hell, that started under Market Reg back in the '70s, and I was dealing with Market Reg people all the way up until the creation of the Office of Municipal Securities. I knew that Market Reg would have input to anything that dealt with real-time, even if they weren't "the rule approver." So I just viewed it, okay, we're dealing with the staff, or we're dealing with commissioners, it was one or the other. It wasn't sort of like one office or the other. I mean, yes, I had a point person in Martha who'd come out of the industry when she was there. I had a similar thing with Maco. It's easier to talk to somebody, or argue as the case might be, with somebody who's been in the industry, and who are bond lawyers. Now, both of them looked at the world as lawyers, not as market economists, if you will. And I'm not saying that my view of the world is the absolute end-all, be-all.

WT: Okay. So the next thing I have, then, was what you had – half after you of I guess – is finally the creation of EMMA and the process leading up to that. I guess we've covered it from the market information side of things quite well, but then there's just the whole technical process, the negotiations, and so forth.

CT: Well, from really 1990 to the time that I left, we were dealing with information systems, and we were able, quite frankly, to successfully base most of the creation of this stuff in the '90s off the PC. There was just enough software sophistication and the like that we could have relatively cheap computer power available to us to do things like setting up the library to scan and store official statements efficiently and relatively cheaply. And we were able to do the same thing with transaction reporting.

The hardware – I mean, I think this is responsive to what you're asking – but what we were looking at was trying to not get too sophisticated. One of the things that I had seen in the '70s and '80s prior to that was that the securities industry had a problem – and you can actually trace a lot of mergers and acquisitions in the '80s to the following – which is that XYZ firm would put in a brand new computer system to handle trading and everything else, and therefore they would gain a cost advantage over their competitor who had a system that was, say, three to five years older.

And so that's how Shearson acquired Cogan, Weill, Berlind. One of the things is that they could bring – why did Shearson get taken over, because American Express had bigger, better computers. I mean, it's not the only reason, but the deal is that he who had the latest technology – for a long period of time before the advent of, really the takeover by PCs of the world – because they had hardware that was very expensive and very expensive to maintain, they had a cost advantage over the other guy. The one thing that I didn't want to do when we created the library originally was to have a situation where we were going to be a captive of the historical cost of the hardware and software. You know, I wanted to try to make it, "Okay, we can throw it away. Yes, it cost us money to build it, but we can throw it away and take advantage of the cheaper, better way to do it, and over the long haul it's going to reduce the cost of the system."

The technology allowed us to talk about transaction reporting. I couldn't really have talked about transaction reporting, or even pushed the idea in the early part of the '90s, given the technology. But by the end of the '90s you could. I think it was exemplified – I had put a PC system in in our offices and everything, and most of us were using e-mail and knew how to get on the net and everything. I think it was in 1996, I asked all the board members for their e-mail addresses. Half of them gave it to me readily, not a problem. The other half, "What are you doing?" You know, "Don't you know fax, can't you send me a fax? Why do we have to go this way? Send me a document." And within the space of five years they were all sitting there, saying, "Why are we getting all this paper? Give it to us electronically."

So that has to be in the background of the whole push of EMMA, which I considered to be all part of the same thing. It's providing the basic information that markets need to function. And that thought was captured in the document that we issued, the talking paper, white paper we produced in 1990, that said, “Look, ultimately what we want to do is make all this information computer-accessible to everybody, because then the market will determine, yes, you’ll have a free market. You’ll have a fair market, because pricing will be determined that way.” And that’s what you really want. I’m not going to sit there and say, “Well, an investor should never have to pay XY,” or whatever, or, “The dealer is limited by A, B, and C, in terms of profit.” Let the market determine that. But in order to have a fair system you have to have certain rules. And that’s what we were trying to do with the technology.

Congratulations to the board for the subsequent steps that have been taken and how they’ve used the information, and I’m thrilled that it’s out there and available and continues to be out there and available. It would be nice if there were more.

WT: So, on the subject of municipal advisors, of course Dodd-Frank is the turning point on that, but there was interest in the subject well before that, yes?

CT: Oh lord, yes. Speaking of eternal wars, I often joke that if I had gotten fired in the ‘80s or ‘90s, the first thing I’d do is hang out my shingle as a financial advisor to municipalities. I mean, I did it somewhat facetiously, but the point was there was absolutely no regulation. You go to Orange County, there was a financial advisor hired by the county who had zero qualifications. You had no clue where this guy was coming from. He wasn’t regulated. He was like you or me, Joe Private Citizen. And so, literally, people were holding themselves out. There was no training requirement, there were no standards of fair treatment and the like, you know. You wanted to be a municipal advisor, you could be a municipal advisor.

And the sophisticated dealers, the larger dealers and a lot of the dealers would go into an issuer, and they'd say, "Look, we know the market, let us be your advisor and underwriter." And, to a certain extent, I think that the independent financial advisors viewed that, and rightfully so, as somewhat of a conflict of interest. And so they would sit there and say, "Look, you're not getting unbiased information from that guy. All he cares about is selling the bonds at the highest possible price to him, so his profit is the bigger. He's a profit-motivated person. So why should you expect necessarily that he is going to have your best financial interests at heart?"

Anybody who really wants to really sort of understand a little bit about the conflicts of interest and everything else that's going on should go look at Barney Frank's hearing, where they were talking about swaps and auction-rate securities. It was, I think, in March of 2009, '10 – I've lost a little bit track of exactly when the hearing was. So he gets five issuers up in front of him. He has four panels, one of them was an issuer panel, all of whom had suffered because the auction-rate securities market had collapsed in February of 2008. These people were going, "Oh my God, we're dying, we've got to pay these extra costs." Because the way that auction-rate securities were concerned, suddenly they had accelerated payments that had to be made, they had higher interest rates, it was a disaster for issuers. So they were sitting there, running on this litany of it, and Frank, I think, asks all of them in series, and he said, "Okay. Now you've told me the problems.

You said they were brought on by the underwriters that you dealt with. Now, tell me, who have you hired to help you rectify the situation?" His question was effectively, "Is it the same underwriter, or did you get outside financial advice?" And, without pause, they all said it was the same underwriter that had gotten them into the mess who was running their auctions, whose auctions failed, that caused them the stress, that was trying to bail them out.

To which Barney Frank's response was, "This is the Patty Hearst syndrome, or the Stockholm syndrome, where you have become captives of your underwriters." I mean, he was vicious, as were a number of members of the panel, in saying the issuers were not getting unbiased advice. And, if I had been an independent financial advisor at the time, I'd have recorded that hearing, gotten a transcript, and showed it to every prospective client, and said, "Look, this is what happens when you're relying on your underwriter, whose interests are different than yours, to give you financial advice."

That being said, as I said, there was a wide variety of who was a financial advisor, who was holding themselves out as a financial advisor, and there were a whole bunch of those guys just as guilty as the underwriters for giving the issuers bum advice. And they had no legal responsibility, if you will, to the issuer, where it would be easy for the issuer to say, "You screwed me by telling me to do X, Y, and Z." In other words, the underwriter had no financial incentive or concern to give the best possible advice. Now, I think a lot of them did, but there were a lot that didn't, and that is a situation that's ripe for regulation.

I think the wars are still going on, from everything that I read casually. The people that are primarily independent shops are still complaining that the dealers are not adequately covered for their rendering of financial advice, and the dealers are saying that financial advisors really don't have their pulse on who's buying and what the market is there. If you want to know the truth, part of the problem is the negotiated underwriting system. That is not a system that's designed to give the issuer a lot of unbiased advice, and that he can then follow or track. The negotiated system is basically the issuer chooses who sounds like they got the better team, and they agree to pay them, and that person gets to underwrite the bonds and controls everything and can give financial advice under the table, or explicitly, whatever.

And, as opposed to a situation where the issuer says, "I'm going to sell $50-million worth of bonds by competitive bid, give me your best bid. The only thing I want to see from you, underwriter, is how much you're going to pay to buy my bonds" – because that system recognizes the different financial interests of the two parties. Then the issuer should have a financial advisor. It could be another dealer, it could be an independent, it doesn't matter, they can hire somebody to advise them on what the structure of that deal should look like that's in the best interest of the issuer, solely in the best interest of the issuer.

WT: Does this issue, then, go hand-in-hand with the consultant issue that we were talking about in our first session?

CT: No, not really. The consultant issue, to my way of thinking, was more that consultants were hired by the underwriter to get into the negotiating business. It's a tie-in because it's a negotiated system, but it's not tie-in because of the hiring of consultants as a financial advisor. It's a tie-in because the system that predominates is a negotiated underwriting system, and that really grew out of developments in the '80s.

WT: Okay. So is there anything we should talk about before your departure?

CT: Wait a minute. I'm already departed from the MSRB and from the muni market. The next departure is more permanent, and usually resides six feet under.

WT: No, no, no.

CT: Before your departure? No, I don't really think there is. Again, I'm an economist. I look at these things as an economist trying to find what produces a fair market, and a fair market will let all the parties benefit to the extent that they should. Adam Smith tells you that, economic theory tells you that, modern economic theory tells you that. And to the extent that it's possible, I hope that the board continues to move in that direction. Only time will really tell.

The odd part about it is, tomorrow a bill could be introduced in Congress to do away with tax exemption. If tax exemption were to go away, the market structure will change radically because you suddenly – when we talked about yield burning and interest rate swaps, that whole other side of the municipal finance deal, the issuance of bonds and the investment of proceeds, you've suddenly removed a lot of incentives that were over on the one side. This stuff all becomes very different. Munis get compared directly to Treasuries, they get directly compared to corporates, the market for them may well expand, because the stuff could be sold abroad and everything else.

So, things to look for, maybe that's the way to end this. How long does tax exemption last, and in what form does it last? Watch for changes in the structure of the dealer community. Dodd-Frank is changing the role of dealers within banks, and now, by the way, everything is a bank, so those market structure things are very interesting. And lastly, go back and think about the fact that so much money flows through the state and local sector. How are these state and local governments handling this enormous responsibility, and those are the more broad policy issues than just looking at what the MSRB does. The answer to those issues very much affects what the MSRB does, and how useful the MSRB's rules and the organization are.

WT: Okay, so I gather then that you're not keen to talk about the circumstances surrounding – you said you were fired?

CT: My contract was not renewed, and the board had the perfect right not to renew my contract if they didn't choose to. There were a lot of personal politics that were involved of the individuals that were on the board at the time, but I think one has to look at a sort of broader thing, which is we had just shoved through real-time. We just pushed through G-38, banning the use of consultants. These changes were causing a lot of turmoil within the industry, interest rate swaps, which we didn't deal with, was creating turmoil.

The people on the board were sitting there seeing all this turmoil, and I'm the natural sort of, "Gee, we have to have a change in order to resolve all of this." I was amused at a couple of people during the time when I was sort of told, even before I was told the contract was not renewed, but also after that, "Hey, Kit, the market paradigm has changed and you're not keeping up with it."

And so I can sit back and smile and say, "No, the market paradigm didn't change. It's called a financial crisis and an irrational expansion in the volume of credit, and you guys got burned bad because the market paradigm was not a paradigm change at all. You know, things do get back to normal. There is a normal thing. It isn't going to fundamentally change the way you think it's going to change. You keep wanting to believe it's going to change because that means profit expansion, salary expansion, or whatever."

So the view that how I was looking was outdated has proven to be wrong, and so there's some satisfaction in that. At the time, obviously – one wants to leave when one chooses rather than the way when someone else chooses, and I think most people in the industry knew I was being sort of pushed out. And the only thing I can say is, "Best damn lucky thing that happened to me." That's kind of funny. It was an accident that I got into the

MSRB, because I thought I was going to be writing articles off my dissertation when I was at the Fed and watching this market over here. And a lot of people said, when I first got involved with the MSRB, they said, you know, "We all get into munis by accident," and I sort of got into munis by accident.

And I left, not of one's own volition, but "by accident," if you will, and thank God I didn't have to deal with the aftermath of the financial crisis. Because the MSRB has been subsequently asked to do many of the things that I thought we should be doing, but a lot of the board members didn't think we should do. So Dodd-Frank, and the financial crisis, has pushed a lot of stuff on the MSRB much faster than it would have happened in the absence of a financial crisis. But I'm just glad I didn't have to deal with that.

WT: Well, let me ask you – I don't think I'm apt to speak with anyone else who has had a job for, was it twenty-nine years?

CT: Oh, twenty-eight years, eleven months.

WT: Right. And so I'm often told about the various virtues of moving around from place to place, but I don't think I have anyone to speak of the virtues of being somewhere over a period of vast change.

CT: Maybe that was the question you should have asked instead of "When you leave…" The thing is that, you look at what the MSRB did – and I look at the achievements in the

MSRB during my tenure, and I realize they had five, maybe ten-year… the timelines were so long that had there been changes or turnover, my guess is that a number of these efforts would have failed, or been so substantially delayed. And, again, I go back to the fact that here we are in the twenty-first century, we still don't have secondary market disclosure. It wasn't until the close of the twentieth century that we got even close to pricing. And this is a several trillion dollar market that state and local governments rely on to get the funds necessary to build the infrastructure. I had people coming over from other countries, saying, "Where do you get all these roads and schools?" You get all these roads and schools by the issuance of municipal bonds, largely. And it's keeping that system somehow alive, and understanding that it deals with everything from the Sperryville, Virginia Volunteer Fire Department trying to buy a new engine and issuing $100,000 worth of bonds to do it, to the State of California selling $3 billion in short-term notes.

WT: Okay. Unless you have anything else to add?

CT: I don't.

WT: All right. Well, thanks very much for your time over these two sessions. It's been extremely informational, and we much appreciate it.

CT: Well I hope people get something out of it.

[End]