--- On resuming at 1:01 p.m.

CHAIR: Mr. Summers?

MR. SUMMERS: Thank you.

CHAIR: I think we are ready to begin.

PRESENTATION BY ADVOCACY COUNCIL OF THE

## CFA INSTITUTE SOCIETIES IN CANADA

MR. SUMMERS: I'm here today representing the Advocacy Council of the CFA Institute Societies in Canada. We are 12,000 members of the CFA Institute across the country, the majority of whom are here in Ontario. Our role as our Council, we are all volunteer members of our Council, is to comment on security regulations as it pertains to investor protection, our code of standards and ethics.

It's important to note all of the members on our Council including myself are here speaking as individuals, not on behalf of our employees or clients. Having said that, I can tell you that just given the nature and number of different organizations that are involved in this particular -- we actually had a number of people recuse themselves from our normal deliberations which sort of left those of us who are either not affiliated with the TMX or any of the other Maple Group participants or had significant client relationships. We had a very small subset and ended up

putting --

MR. KELLY: 12,000 members down to about 40?

MR. SUMMERS: Pretty much.

Of our primary concerns, there are sort of four broad categories. The first one is board independence. I will just speak briefly to that.

The existing board charter of the TMX speaks to its responsibilities to shareholders, employees, customers, governments and the public, and in the transaction as proposed, Maple has indicated the majority of directors would be independent directors.

Our question is, as the largest shareholding block they're going to be able to select who these independent directors are, and our question is: Is that the best way to select an independent director if the independent director has been nominated by one of the controlling shareholders?

On the subject of regulatory oversight, there is a proposed regulatory oversight committee of the board. We're thinking that this should actually be independent of the board and any SRO. It should be a standalone thing. And the outsourcing of the listings, regulatory function is something else to be considered. If you've got one organization that can sort of

determine who gets on the exchange and who doesn't get on the exchange, this is something that should probably be moved back into the regulatory realm as to who is eligible for a listing or not.

That's something that would probably make more sense to do it now than put the transaction through and then say down the road we are going to consider having an agency or department of the Commission or IIROC or somebody saying who is eligible to get a public listing.

Third area -- I know I'm kind of rushing through this. Perhaps we will have questions later.

Conflicts of interest, I think is something that has been addressed by others and I'll raise it as well. There are dealer users who are not affiliated with Maple and there are dealer users who are affiliated with Maple. And it doesn't take a whole leap of imagination to imagine at some point in the future there will be some kind of complaint or an allegation that one of the bank owned dealerships was given treatment that one of the independent dealerships was not given. And I think that's just going to cause problems down the road unless there's adequate representation of the independent dealers on the board.

That means not just one seat, probably two or three seats, so that that independent dealership community feels they have a strong voice in how things are being done.

All of these conflicts of interest are kind of a disaster, an accident waiting to happen, and it will be expensive. There will be lots of legal fees and settlements and complaints. And all of those costs are not going to get passed on to shareholders, but to the end investors in terms of higher trading costs.

Finally -- this took a lot longer when I had to do it in French in Montreal.

CHAIR: And how did it go for you there?

MR. SUMMERS: Pas mal.

Finally, with respect to competition, the ATS, alternative trading system, we believe that the creation of the Alpha system by the bank-owned dealers a few years ago was a good thing. More competition generally is almost always a better thing. To consolidate that back to underneath the TMX umbrella would probably be an anti-competitive move.

If anyone were to come along and say

I'm going to set up a new ATS in Canada, would any of
the bank-owned dealers even send them any orders? I

think that is another question to be considered.

Also on the subject of innovation, all of this competition has been very good for innovation. I mean, the exchange today is a whole lot different than the exchange in 1987, same for all of us in this room, and that innovation comes from competition and the incentive to improve. And if you move to a less competitive environment, are we still going to see the same rush to innovation that I think has been a benefit to both listers and investors?

Finally, our conclusion, the rule in the Bank Act, 10 percent rule in the Bank Act.

Whenever I travel -- I'm frequently in the U.S. My company is based in the U.S., and they ask about the impact of financial crisis in Canada. I said we have -- two of the smartest things that the Canadian government ever did and saved us billions, possibly trillions of dollars: One is that mortgage interest wasn't deductible which limited our housing bubble and we have the 10 percent rule that the banks had to be widely held. As a result, they acted much more responsibly I believe than some of the U.S. banks that were closely held. So we have this 10 percent rule right now with the TMX and it's been a good thing.

This transaction comes awfully close to

the spirit of -- is this actually -- you've got a whole group of people who control 60, 70 percent of the exchange. They're all individuals. No one owns more than 10 percent each but as a block they certainly do. And I think that 10 percent rule should be honoured both in the spirit and the letter.

Also it should flow upwards. If there were any other -- anyone else out there outside of Canada who would be interested in acquiring the TMX, that 10 percent rule should be apply upwards to their corporate structure. I just think it is a really solid thing.

We believe that CDS should remain independent of TMX. TMX is run for profit but there's nothing wrong with that. CDS is run as a cost recovery agency and it works really, really well. It is not compatible with business cultures. Bringing CDS into the fold, just to me does not seem like a necessary part of this, from the perspective of a lister or investor.

We believe that the Alpha group should remain independent for the same competitive reasons we noted earlier. Competition is good for the industry and the more places where people can bring their trades to, the more innovation and lower cost to people in the

long run.

Finally, it's our belief that the interests of Canadian issuers and investors are not necessarily best served by having the the TMX controlled by Canadian institutions, rather through smart regulations that promote investor confidence and efficient capital markets. And that is the end of my prepared testimony.

CHAIR: Thank you, Mr. Summers. It would be of some help to me to understand exactly what the role of the Canadian Advocacy Council for the Canadian CFA institute Societies. So I think you started out by saying you're not speaking on anybody's behalf but your own. I guess you're not. You're speaking on behalf of the Canadian Advocacy Council.

MR. SUMMERS: On behalf of CFA charter holders in Canada, of the 12,000 CFA charter holders through their professional association the CFA Institute which is an international organization. We have 12 societies in Canada and 12,000 members, and our group meets and comments on matters of security regulation, public policy, things like that.

CHAIR: Was that not the organization

Ms. Franklin chaired or is that a different one?

MR. SUMMERS: She was the head of the

CFA Institute internationally over all. So that's a couple of pay grades above where we were.

CHAIR: I understand pay grades. So in your submissions today, it's helpful just to position your comments. The Canadian Advocacy Council exactly is what?

MR. SUMMERS: We are the voluntary members of those 12,000 individuals who decided that we will speak on -- or we have been asked to speak on behalf of the professional association.

CHAIR: So you're a CFA.

MR. SUMMERS: Yes.

CHAIR: And that's how you have come to provide these submissions to the Commission and the AMF, obviously.

MR. SUMMERS: Yes.

CHAIR: That's helpful. Thank you very much. So how does this transaction affect you? Or your business or CFA.

MR. SUMMERS: It doesn't affect my business at all. My business is based in the United States.

CHAIR: We're learning more about you as you as we go along.

MR. SUMMERS: This affects CFA in a

number of ways. Primarily it's going to be -- how it affects their clients. It's going to affect their clients probably in the long run with higher costs and I believe also higher systemic risk, if it were to go through as originally proposed. Those are probably as a Charter holder, the typical Charter holder working in private practice, these would be the impact of it.

MR. KELLY: So when your organization develops an opinion on a certain matter, does that then become an opinion that's shared by -- what sort of influence do you have over the members to give that opinion? What I'm asking -- I'm sure there are CFAs involved in the Maple Group as well who understand the opinion of the organization that they're a member of, and they would also understand the differences of opinion that you would have with what they're doing. How do you reconcile that?

MR. SUMMERS: The people who were directly involved in this recused themselves. We are a couple of dozen people in our Council. And the people who are directly employed by Maple Group participants recused themselves from all of those discussions.

The broader 12,000, they exercise their influence on us through their Society board of directors who then get in touch with me with any

comments or concerns they might have about various issues, none of which were raised about this one by the way. We have had no concerns brought to my attention from any of the societies about this.

MR. KELLY: So in the comment letter that you gave to us you raised the outsourcing of the listing function as a topic for discussion. Are there any other mechanisms that could address what you describe as a conflict of interest associated with the Maple proposal?

You talked about from a regulatory oversight committee. Can it be structured in such a way that it adequately addresses some of those concerns, perhaps reporting in some way to the Commission? Is that one answer?

MR. SUMMERS: If it had a direct line relationship to the Commission, I think that would absolutely go a long way to addressing those concerns. That would be a really good development, I think.

MR. KELLY: Are there some other methods that you can think of that would help to address these potential conflicts of interest?

MR. SUMMERS: Well, because there's different conflicts of interest in different parts of it, so with respect to regulatory oversight part of the

board, there is not a dotted line, not an indirect, a liaison type of relationship, but a direct reporting relationship to the Commission. That would be, you know, you would have solved that particular issue.

The conflict of interest with respect to how independent are the independent directors, you know, there are -- perhaps they would be vetted by an independent committee, possibly even vetted by the Commission as a way of ensuring that -- like, it's the definition of what is an independent director. I think if you work for one of the Maple Group people or if you -- within the last five years or if you're drawing a pension or consulting arrangements or any sort of, you know, work type arrangement like that, you're probably not independent. And it probably wouldn't be too difficult for the Commission to sort of determine that, you know, Mr. Jones is independent and Mrs. Singh is not independent, as people were being proposed. I think that would solve that thing.

It's going to be really important if and when this goes through, that the board is perceived as not being sort of answering to the banks. I think that's a big concern of a lot of sort of independent people especially outside of Toronto. So if that's there, I think that would cause everyone to feel a

little bit more comfortable of the independent board.

COMMISSIONER CONDON: If you don't mind I'll shift the conversation a little bit to the discussion about clearing, and you've provided your views of your organization on that issue. Just in your comments earlier you mentioned the issue of systemic risk. And innovation.

So why would it be your view that the current structure of CDS would be better positioned to deal with systemic risk issues than a for-profit model?

MR. SUMMERS: It's not the for-profit model I believe that's going to introduce the systemic risk necessary. I really don't think that the for-profit model is going to cut corners and not do key upgrades. I think that's not it. If you have the primary exchange and the primary clearing mechanism and the primary alternative trading system all under one overarching umbrella, you really have put almost all of your eggs in one basket. I think it's very helpful to have that clearing system.

Obviously there's a very close relationship between the Exchange and CDS but it is its own infrastructure and in having conversations with people about operational risk and systemic risk and sort of technology things, they sort of kind of came

back to the point that it's not always a good thing to have everything in one place, especially if that one place is a corporation that's being run for a profit.

COMMISSIONER CONDON: So just to make sure I understand, even if CDS were run on a cost recovery basis by Maple you wouldn't see that as a --

MR. SUMMERS: It's the degree to which the infrastructure is kept separate. If you consolidate those infrastructures, a TMX infrastructure and a CDS infrastructure in separate places.

COMMISSIONER CONDON: But, then, by the same token you mentioned fee regulation in your letter, but that's addressing other aspects.

MR. SUMMERS: That's addressing the for-profit part of the CDS acquisition, is if you go from a cost recovery model to a for-profit model where you basically have like this is a monopoly service in this country, yes, there are competing animals elsewhere in the world, but in Canada, in Toronto, this is it. We would want to ensure that the profits being brought out of that were not super economic, to use this sort of academic term, but fair.

And that's where -- and it was one of our Quebec members who put in the language in our letter about similar to how electricity rates are

regulated. Hydro Québec goes in and says this is what we want to charge in terms of kilowatt hours, this is our costs are for running all of our dams and things like that and they say that's a fair return on your investment and away they go.

CHAIR: I wish it were that simple.

COMMISSIONER CONDON: So it's that sort of fair and reasonable return on investment model that you would advocate to the regulators. So Plan A is to keep it independent. Plan B is the regulators regulate the fees and do it on this sort of --

MR. SUMMERS: Yes. Yes. Yes.

Absolutely. Plan A is definitely keep it independent.

If the decision is made to allow them to be consolidated you need to ensure that the fees being charged are reasonable.

CHAIR: Mr. Summers, you know, in these proceedings there has been a lot of suggestions around public utility models and how economic regulation starts to creep into the traditional role of the securities regulators which really has not been extensively involved in what I would call economic regulation, which I think you're getting at when you talk about public utility regulation and setting of electricity rates.

It raise an issue from my perspective which is really a public policy issue, and it's this. Are you really saying that basically if you have to go that far as a securities regulator, you are then adopting an approach to regulation which is quite unique and different than what the capital markets have been exposed to and potentially the way in which regulation of these markets, at least back to the '30s or so when we had our first securities regulation in the U.S., and I think this Commission will be 75 years old; is that correct? Next year, or soon? How many years is it? 75 years?

COMMISSIONER CONDON: I take it we're not planning a big celebration.

CHAIR: Strike that from this discussion.

The point of it is this, that using these examples are suggesting an approach to capital markets regulation which really has not been adopted by SEC, OSC or any or any securities regulators or worldwide, I would say. There are some small examples, you know, market data fees in the U.S. get exposed to some form of rate regulations, more caps I would say, but it's not extensive rate regulation that you have described here. Are you really advocating the Security

Commissions starting regulating these types of facilities on a cost of service or incentive rate-making basis?

I personally have some experience in that area, and I just find it challenging from a public policy point of view to kind of understand why it is that those suggestions are coming forward. Can you help me with that?

MR. SUMMERS: Yes. I'll try.

It is new ground, and it's new ground because it's a new idea to run CDS for profit. CDS is, I mean, talk about an organization that never gets into the newspapers. It runs really, really well on a cost recovery basis, and the members of CDS many, many years ago worked for the Province of Ontario when we joined CDS and got rid of our cage and went to a book based system. It was an exciting learning experience for me as a young guy. It worked really, really well as it is now on a cost recovery basis because we were running something on a cost recovery basis everyone, you know, common sense prevails because people are always looking for what is the most efficient way. Efficiency is driving -- efficiency and customer service.

If you decide that, okay, now we're going to start charging, bring people into this who are

not -- who weren't members before and going to start charging them fees, it takes things in a different direction. And the public regulation of prices, you're right, it is going back a generation in terms of public policy but this is a transaction that's wanting to take something that is working really, really well as part of the central nervous system of the capital markets and make it a different kind of animal.

One of the questions that raises is:

So if it's so integral to the deal it must be because you're planning on raising -- part of the synergies must be price increases and who is going to pay these price increases.

CHAIR: So let's talk about your clients. Are they going to pay for it?

MR. SUMMERS: Not my clients personally, no. My 12,000 colleagues? Yes, they will.

CHAIR: But they will pass their costs on to their clients.

MR. SUMMERS: It's the end investors.

CHAIR: That's really what I'm getting at.

MR. SUMMERS: That's ultimately who ends up paying. It's not going to be the shareholders who pay. In terms of reduced dividend yields,

whatever. It's the ultimate end investors. I will grant the fees we are talking about here are pennies per share, they are, but those pennies per share add up.

CHAIR: In today's, markets there's a lot of shares traded --

MR. SUMMERS: That's right. That's right.

CHAIR: I think IIROC is up to 200 million messages a day on many days, I think that's correct.

Take this a step further then. I think you're also getting at the cross-subsidy issue, were you not? I think I wrote down you discussed it.

MR. SUMMERS: I don't recall these phrases in here.

CHAIR: Maybe I wrote it down in connection with something you were mentioning. You've heard some of that discussion this morning?

MR. SUMMERS: I wasn't here this morning.

CHAIR: So I'm going to leave you out of this question then because I think it would be a bit unfair to you.

MR. KELLY: I am not sure how extensive

of your knowledge of the clearing system is so if this question doesn't fit for you just say so.

I keep trying to figure out how we can create competition in the clearing business if this transaction were to proceed. One of the things that Canadian investors are required to do is if they trade in a listed stock in the U.S. I'm advised that that trade is cleared by DTCC, but it's with CDS directly.

opportunity for self-clearing firms to become direct participants in DTCC for those interlisted securities as opposed to having to go through CDS. I get it in the current not for profit or cost-recovery model we have today, but is there something that would stop that from happening in the future, to your knowledge?

MR. SUMMERS: You are kind of beyond my technical knowledge of the clearing area. I would just say that we are inevitably moving towards a more integrated global marketplace, and to the extent that we haven't discussed the CDCC/CDS co-habitation and the degree that would allow cross-collateralization which would be a good thing, it would be an even better thing if it was required that everyone put their OTC swap positions in the same animal as well. You can only imagine how many better 2008 would have gone if

everybody's swap books had been transparent and consolidated in one spot.

CHAIR: I think that concludes our questions. We appreciate your coming here today. Thanks again for your submission.

MR. SUMMERS: Thank you for the opportunity.

PRESENTATION BY EDWARD JONES:

CHAIR: You are here for Edward Jones.

MR. BENNETT: Yes, I am.

CHAIR: Tell us a bit about your company and the reason why you're here and proceed with your submission.

MR. BENNETT: My name is Doug Bennett. On behalf of my firm, Edward Jones, I appreciate this opportunity to express our concerns relative to the proposed acquisition of TMX and CDS by Maple Group.

First of all, a little bit about about Edward Jones. We are one of the largest independent retail brokerage firms in both Canada and the United States. We have been in the business in the United States since 1922 and have built a branch network of over 11,400 branch offices and have served over seven million clients.

We began operations in Canada in 1994

and have 505 branches serving over 300,000 clients. We focus on the financial needs of individual investors and small business owners. We offer competitive products, stocks, bonds and mutual funds and insurance and we do not offer options, futures, commodities or penny stocks. We continuously look for innovation to mitigate our risk, support our growth and reduce our costs.

To accomplish this we have embraced technology, both internally and with business partners, including industry utilities.

We are an active member of DTCC in the United States and have served on boards and working groups to help support the growth of the industry. Likewise, in Canada we are a active participant of CDS. Our firm participated in the IIROC submission on the Maple Group acquisition.

Just a little bit about myself. I've been in the brokerage industry since 1986, held various roles in both treasury and operations. I had the opportunity with CDS to participate in the debt clearing system, automating account transfers. I also was very involved in the implementation of FundSERV and the various automated initiatives that followed that.

These initiatives are examples of how

co-operation in our industry has allowed us to build scalable system, mitigate risk, and ultimately reduce costs for our retail clients in Canada.

I'm on the IIROC FAS Operations
Committee and the IIROC FAS Executive Committee.

Here are our concerns relative to the Maple Group.

As mentioned, our clients are individual retail investors. We have focussed on conservative investments. Accordingly, my comments are based on the CDS portion of this acquisition.

From its inception, CDS has worked with the broker/dealer community to support growth of the securities industry. They have demonstrated an ability to handle increased involves while reducing costs.

Between 2005 and 2011, as an example, the daily average volume of equity trades increased by approximately six times while the costs decreased by 18 times.

In fiscal 2010, CDS returned over
14.2 million to its participants, 4.6 million in price
reductions, 2.6 million in volume related discounts and
8 million in year-end rebates. It's important to note
this is only relevant in that it reduces the net cost
to the participants.

Should CDS move from a cost-recovery model to a for-profit model I would not anticipate the costs of running CDS would go up. However, we are concerned that the net cost to the participants will go up and would ultimately be absorbed by Canadian investors.

The Maple Group proposal would result in a leveraged entity. There's bound to be pressure to increase revenues and generate profits. In particular, the non-industry investors in Maple will not have the same interest in reducing costs to participants that industry owners have today. Their primary concern will be to generate a reasonable return on their investment.

A for-profit model would be fine if there was a prospect of attracting competing service providers. However, with substantial barriers to entry the likelihood of seeing any competitors enter the marketplace would be slim. Again, increased costs will be absorbed by individual investors across Canada who own stocks and bonds, whether directly, through mutual funds, in their retirement accounts, non-retirement accounts, or through their pension funds.

Over the last 40 years CDS has strived working in partnership with participants to mitigate risk, increase scale, and reduce costs. Canadian

individual investors and all market participants have benefitted.

In summary, we submit it is not in the best interests of individual investors across Canada for the capital markets to allow a for-profit model in a monopolistic environment. The existing cost-recovery model CDS worked well, and we feel it should be maintained. That's the end of my prepared comments.

CHAIR: So I would like to ask you this question, but not so much in terms of your economic view. Do you consider CDS to be a monopoly now?

MR. BENNETT: No, I don't.

CHAIR: It's not a monopoly. Why wouldn't it be? I would just like to understand your approach so I can deal with your suggestions about what you're advocating.

MR. BENNETT: Maybe from our own firm's perspective, we entered business in Canada in 1994 as an introducing broker, became a self-clearing broker in 1999, and then -- I'm sorry, 2009. So we were welcomed at CDS, we worked closely with them, we understood everything we needed to do to become a participant of CDS. We understood the capital that we would need to put up, the rules that we would need to abide by. So there was no limitation for us to join CDS as a firm in

Canada.

CHAIR: So when I ask you whether you consider it a monopoly, it's because you were able to join it --

MR. BENNETT: Yes.

CHAIR: -- and it was the ease of being able to participate?

MR. BENNETT: Correct.

CHAIR: Were you here this morning when Chi-X was here?

MR. BENNETT: No. Unfortunately, I was not able to attend this morning's session.

CHAIR: They discussed that in

Australia they had some issues around gaining access to
the clearing and settlement. Of course, they're a
every trading system so...

Take this a step further, then. If you think about the existing CDS and the potential acquisition of Maple -- and we have your submissions and we obviously appreciate them. What do you see here as the matter of greatest concern? Is it the continued concentration which people describe, or is it really the for-profit model which concerns you the most?

 $$\operatorname{MR.}$$  BENNETT: A clear combination of the two, but also what concerns me if I reflect back

over the last number of years, 40 years that CDS was involved, the innovation has come from a broad audience, broker/dealers of all sizes, large, smaller broker/dealers, I really feel strongly some of the best innovation has come from the smaller members of CDS because the focus on client service, need to keep their costs reasonable, and I'm concerned that innovation would not be potentially as great by certain people not having a voice at CDS.

in just to follow up on that? You mentioned in your letter that if I understand the gist of it that if CDS became a for profit enterprise the eligibility requirements to become a member may increase which would put brokers like you into the position of having to make an arrangement with an introducing broker.

If that were to start being a problem, are there specific regulatory interventions that you would suggest should be made or ways of trying to avoid that particular problem occurring?

MR. BENNETT: I guess if it were to go through there has been a lot of discussion on the governance and how the I understand bones remain to have a strong voice, and that would certainly need to be studied and clearly understood so we as an industry

group -- as an example, today IIROC, we elect a member from IIROC to represent us, and that is an avenue for all members of IIROC to ensure that we get best possible candidate representatives through various working groups and other activities in our industry, we move things forward. So that would certainly need to be maintained.

So we are concerned -- you mentioned an independent voice, I need further definition to understand how --

COMMISSIONER CONDON: But it sounds like the solution for you would lie in making sure that governance of CDS was an inclusive --

MR. BENNETT: Right.

COMMISSIONER CONDON: -- environment for...is Edward Jones currently involved in the governance of CDS?

MR. BENNETT: We are in essence through -- we're an IIROC member firm, so that's where we have our voice, and we do get ourselves involved in the working group to move things forward for the benefit of the industry.

COMMISSIONER CONDON: I just wanted to follow up on the point. You mentioned you were also a member of the DTCC.

MR. BENNETT: In the United States, yes.

COMMISSIONER CONDON: Can you compare and contrast a little bit your experience of processes and structures in DTCC and CDS?

MR. BENNETT: Yes, we have had a lot of discussions internally with our partners in the United States. We have had fairly significant growth in the United States over the years and always focused on the individual investor, and being active in the industry through DTCC has really benefitted our business, our clients and helped keep costs down. So the structure with DTCC similar to what it is with CDS today has really served the industry well.

CHAIR: Maybe it's something you can't comment on but you have discussed innovation.

Do you believe that DTCC and its structure is more innovative than CDS in its current structure? Or do you just view it from the point of view of being able to expand its capacity to serve the growing market of trading, and we understand the reasons for that, and so when you look at innovation are you looking at new services, are you looking at the capacity to expand those to deal with the growing market? How do you look at it and compare it to DTC?

MR. BENNETT: From a Canadian perspective, the United States is securities market has all been one we want to watch very closely. To your latter point, given the relatively large size of their markets relative to Canada they come up with some of these challenges earlier on than we do in Canada. So we can learn from what they've done to support the growth of the industry.

I'm proud of the Canadian industry, I think we are a very innovative group. I think we work well with the our United States counterparts to learn from them. So I wouldn't necessarily say one is more innovative than the other.

I think by demand at times that innovation maybe came a little bit earlier.

CHAIR: But do you think their service something cheaper than cans even though we're second lowest in the world and they're first? Is it because of volume? Are they are more efficient? Why aren't we are one cent as opposed to two cents? I don't know --

MR. BENNETT: My thought it would be a volume limitation.

COMMISSIONER KELLY: You mentioned that CDS and the proposed structure would be unlikely to face competition, and many presenters have talked about

the substantial barriers to entry. I mean, the obvious one is the marriage capital markets participants own their own clearing system. But other than that one, are there other barriers to entry that we should be aware of?

MR. BENNETT: No, I really -- we are relatively a small industry, and it would concern me to become too fragmented. There would not be a clear winner that situation.

COMMISSIONER CONDON: From your point of view, are there any benefits to the proposed Maple transaction that you would point to thinking about this from the perspective of the Canadian capital markets?

MR. BENNETT: Relative to CDS, no.

CHAIR: I think that was helpful.

You've obviously narrowed the focus on CDS. That's appreciated. Thank you for coming.

MR. BENNETT: Thank you for your time.

--- Recess taken at 1:44 p.m.

--- On resuming at 1:57 p.m.

CHAIR: Well, Mr. Stephenson, you are our last presenter.

MR. STEPHENSON: I take that as a good thing.

CHAIR: Tell us, sir, about Paramax

Solutions. I know you sent us a letter. We'd like to hear from you.

PRESENTATION BY PARAMAX SOLUTIONS INC.:

 $$\operatorname{MR.}$  STEPHENSON: Thank you. I'll start off about who I am and I'll touch on sort of four areas that I think are most important.

I was going to say most people don't know me, but people have been introducing themselves to me that I knew a long time ago. But it's kind of unusual for clearing and settlement.

I'll talk about my background and what Paramax does. I've worked in clearing and settlement for about 24 years. I've worked at CDS off and on, twice; I had two stints there. Then I went and did some consulting overseas, been a consultant to the World Bank, Asian Development Bank Arab Development Bank, stock exchanges, and I've done work in about 25 different markets around the world.

I wrote a paper for IOSCO; I think it was the first paper they ever did on clearing and settlement. I'm not sure they knew what clearing and settlement was before that.

In about 2000 I set up a company called Paramax Solutions. What we do is provide mostly interface software to depositories, mostly CDS, but

also DTC, and Clearstream and Euroclear. And so that's our business, is to try to make our clients as efficient as possible in terms of communicating to and from those entities.

I'm going to come back to this a little later because I think would we do is under the term of innovation. That's one of my themes here. When I sort of look at some of the material that has gone on, there seems to be this idea that only CDS or CDCC or TMX are involved in this, what I would call market innovation. That's not true. There's all kinds of companies out there like mine that are involved in this and provide innovation, fill gaps, do all kinds of things. I'm talking about this a little bit.

Many people would consider me to be an expert on clearing and settlement, but before anybody thinks I'm not going to fit my head through the door I'm going to tell you a little bit about one anecdote that I think describes generally how clearing and settlement does -- probably until now, because I've never seen so many people interested in clearing and settlement in my life.

CHAIR: It's Top Ten now.

MR. STEPHENSON: Years ago when I was back at CDS after doing some consulting I got some

request from this Korean depository to help them a little bit with something. We met at a conference, I helped them, and they were very grateful and wrote this very nice letter to me and copied my boss, who was the CEO of CDS, and I thought this is great. I had just come back to CDS, and I thought this guy is really going to think I'm hot stuff. They were being very, very effusive in praise. And I thought there's something wrong with this.

When I went back and read it carefully I realized they had addressed it to "Gary Stephenson" at the Canadian "Suppository" For Securities. It kind of puts me in my place. I still have that letter and look at it very regularly.

CHAIR: Can we take you seriously anyway?

MR. STEPHENSON: It's more about the evil of spellcheck in Microsoft Word.

Obviously, everybody thinks it's important because we're here, but I think the importance is what happens when you convert something like CDS from not-for-profit to for-profit.

 $\label{thm:cond} \mbox{The second area of misunderstandings}$  that I've seen or heard are in some of the submissions.

The third is what I think are potential

or likely impacts, both good and bad, and then what can be done about that, what could you do to deal with some of that.

I'm going to talk a little bit first about the importance. I guess I'd start by saying I don't think you could overestimate the importance of what's going on.

I'm going to use an example. I think part of the problem is there's not much understanding in general about what CDS does, what clearing is, where the lines are drawn between various things that are called "clearing" and "settlement". It's a bit of a grey area. I'm sure most people knew who the Maple representatives were because they're in the news all the time; most people wouldn't have much background in clearing and settlement. I know the press sometimes struggle. They call it the "plumbing" and things like that. Because there's not much background or focus in the past, there tends to be a little bit of misunderstanding about what it does and how important it can be.

I'm going to give an example from about ten years ago that I think illustrates how important in kind of area is, and that was in the late '90s and before 9/11 actually there was a movement afoot to move

the markets in Canada and the United States from

T Plus 3 settlement to T Plus 1 settlement. That's a

technical term in clearing. But there was this move to
do this.

I was on a committee that dealt with that and Mr. Wetston actually was on that committee as well. He was merely vice-chair at that time.

CHAIR: You mean the Canadian Capital Markets Association?

MR. STEPHENSON: Part of it, yes.

That committee had a deputy governor of the Bank of Canada, CEOs from custodians, executive vice-presidents from banks. That was the level of seriousness they treated it with.

The concern was what would happen if the U.S. market moved to T Plus 1 and the Canadian market didn't. What would happen to the overall investment business if that move happened.

And they commissioned economic studies to see the impact, and they had all kinds of working groups that looked at it, and they spent a lot of time and effort on that.

When 9/11 happened that all went out the door. But that was a measure of how important they realized the difference between what we do here and

what they do in the U.S. could be to our markets.

I'd say what's happening here, what's being proposed here makes that look tiny. So the potential for what's going on here versus what was happening there, I think the potential here is much, much greater. Much, much greater. That's an illustration of I think how important it is to 'get it right'.

CHAIR: And we're not at T Plus 1 yet.

MR. STEPHENSON: We're not. And

nobody's moving there.

Another example is when I was working in places like Africa and the Middle East, you know, a big draw at conferences was a guy, Mark Mobius, from Templeton, who jets around the world in his own jet and guarantees -- every market wants him to come and say good things about it.

I used to speak on a couple of panels with him. I was always there -- everybody was there to hear this guy talk about how they could get him to invest 20 million dollars in their country.

But he had a pretty canned presentation. Basically, his presentation was: What do you have to do to get me to invest in your market?

Number one, there has to be an

opportunity to invest for me.

Number two, he said, was the quality of their clearing and settlement.

Then he had a list of eight or nine other things, but clearing and settlement he spent most of his presentation on. They all said you have to have a stock exchange that does real-time quotes; he said we don't care about that, we care about can we get our money out, get settlement, is it going to be delivery versus payment? That was a big marketing thing for people interested in clearing and settlement.

The other thing I would mention is CDS does a lot of things that people don't know about, and that is, they're the backbone of the payment system in this country, and because of that and because of some of the other things they do I'll say the phrase that's out there now, "too big to fail". Well, they're too "important to fail". That's the way I look at it. CDS is too important to fail.

So I think that's the point I wanted to make about why it's important to look at the clearing and settlement part of this very carefully.

The next topic I have is about misunderstandings or what I think are misunderstandings. I know there was a question I think

of one of the earlier people in some of the other presentations. First thing I'd like to say is DTC is not a competitor to CDS, at least in the current world. There is no opportunity for DTC to provide competition to CDS, none whatsoever. I'll explain why that is.

First of all, there is no way for me, if I trade on an exchange in Canada, that trade goes to CDS. I have no choice.

Now, that's probably not the way it was thought of needed to be, it was just when those things were dealt with there was no need to have the choice so things go to CDS. I don't have a choice to say it goes to DTC. I can sell it at CDS and then move it to DTC and I have to pay \$3.80 to do that, to move it cross-border, to move the position north or south.

CHAIR: Is that to clear it?

MR. STEPHENSON: No, just to move the position down there. The second thing is DTC doesn't do Canadian dollars. And there are all kinds of entitlement issues.

If I have a position in the U.S. and there's a dividend, there's all kinds of tax and other issues. So if it's a Canadian that buys that security people will bring it up here in Canada.

Now, it might be a constraint having

DTC, you know, as a quasi-competitor might be a constraint if there were all kinds of rules changed and new things done. That's one of the things to be considered.

If you want to promote competition or a barrier to monopolistic behaviour, then there are some rules that would need to be. For example, I know when the LSE deal was going on CDS sent a submission saying we think people should be able to choose where they clear their trades. So if they trade on the Toronto Stock Exchange, they should be able to say, hey, I'd like to clear it at CDS or some competitor that got set up. It's not possible right now. It's not a choice anybody has right now.

The second thing I want to talk about was cross-margining. I know that's come up a lot as a benefit of this. I wanted to clear up a couple of things.

First of all, that exists already for clients, so if I'm a client of a bank and I hedge my position they are cross-margining me. I don't put up collateral or margin based on the calculation position on the derivative. I put it up on the sum of those.

Now, my institution doesn't do that because they are dealing at CDS and CDCC separately so,

yes, they have to collateralize both positions, but the clients do not. And that's just a cost that the institutions pay when they are providing that service.

Now, margining and collateralization and all that, that is an extremely complicated, extremely difficult topic to deal with, and the choice is not would I like to cross-margin my derivatives and my cash positions. Yes, I would. Of course, I would. Everybody would. But that's not the choice I'm given. The choice is would I like to do that and share risk with, say, MF Global, or would I like to not do that and only share risk with Royal Bank?

So, you know, the fact about who I share risk with is often much more important and typically has been more important than what securities I bring into the mix of sharing risk. And I've been involved in -- thank God it was a decade ago, but I've been involved in debates that went on for years about that exact topic, who could I share risk with or wanted to share risk with.

In the past at least, I'm not saying it's still the case, but in the past major institutions in Canada asked that question. They chose not to share risk and not to combine those positions because it allowed them to pick who they had to take risk with.

The next topic I guess --

COMMISSIONER KELLY: Before you leave that, can you just talk for a minute, how does the pricing for those derivatives occur, where does that --

MR. STEPHENSON: -- on the Montreal exchange. That's where the price discovery is.

COMMISSIONER KELLY: So I'm thinking of off-the-run securities.

MR. STEPHENSON: Off-market you mean?

I'm not an expert in that part of it.

I also want to talk a little bit under the heading of misunderstandings about innovation. Converting CDS to for-profit there's generally an acceptance for-profit institutions are probably more innovative, more motivated to do things. And I think that's generally true, but it's not the only fact. This is where my business I think comes in.

So myself, my company, we provide software to people to do mostly what's called straight-through-processing and exception processing. In a lot of cases we are filling gaps that CDS doesn't fill or somebody else doesn't fill. There are dozens of companies that provide that.

So the only path to innovation is not making CDS for-profit or keeping it not-for-profit.

There are lots of other ways than innovation is done in our market. I think people have to keep that in mind, that whatever happens that we don't want to -- obviously, I'm speaking from a selfish position here, but we don't want to do anything that would push that out.

I'm going to give you a concrete example. My service, my business relies on a real-time messaging interface from CDS. CDS doesn't charge anything for those messages. They don't charge me anyway but to my clients or dealers.

A few years ago there were some people at CDS who thought they could make a lot of money for this if we just charged for those messages, and they could have because we are talking about 5 million messages a day So it doesn't take a lot of pennies to make a lot of money. And the owners of CDS, who happened to also be my clients, decided that wasn't in their interest. It wasn't in the interest of straight-through-processing and efficiency. So they stopped that.

That's not likely to be the case at a for-profit entity to do that. They have to make money: We are doing a lot of work on this, we should charge for it. The fact that it might be detrimental to some

efficiency in the market is probably not going to be the overriding factor. That's a concrete example.

The next thing I talk about is there was some discussion about the ability to combine things from CDS and CDCC and the ability to see everything together. The reality is that's possible today. I don't know anybody that actually wants to do it, but it's certainly possible because that's a fairly simple technology thing to do.

The analogy I'll give is what my product does with various depositories. So I do have clients who came to me and said we would like to see what we're doing at CDS and DTC together. So we provided that. No one's ever come and said we'd like to see what we're doing at CDS and CDCC together, not something on the list to do. But if they wanted to that would be easy for someone to do.

There's dozens of companies that could provide that. That already exists in some ways in the back offices of the dealers and the banks. So their brokerage packages, IBM, Broadridge, ADP, they do see all of those because all those positions are recorded in those books and records.

CHAIR: Did you say between CDS and DTC?--

MR. STEPHENSON: Our product does CDS and DTC, yes. And in some cases Euroclear and Clearstream. So we have some clients who want to see all of that together. The idea of combining data, there are lots of ways to do that. It's a pretty drastic manoeuvre to say you have to take over CDS or combine the two to provide that. It's not necessary for that. There may be other reasons to do it, but that's not one of them. That could be done in a month if somebody really wanted to do it.

And the last thing I talked about a little is risk management. You've got to separate risk management as it pertains to CDS and DTCC themselves, especially in their role as a central counterparty because they then become party to the risk, and so they have to protect themselves from that risk, and so they have -- both have, I think, very sophisticated risk management systems that figure out how much risk they are facing and collateralize it and so on.

That's where some of the debate comes in that I mentioned before how are you going to share that risk because what they're doing is collectivizing it, mutualizing the risk, and then apportioning it out because they're not actually eating the risk; the risk gets put out back into the market. And how you do that

is what takes years and years to debate.

What CDS and CDCC do not do is provide risk management to their clients. CDS and CDCC are post-trade entities, so it's kind of pointless to identify the risk at CDS or CDCC when it's after the trade is done.

So banks and dealers have very sophisticated risk management systems of their own that do that sort of thing ahead of time. They don't wait until the trade's done and then try to get the data out of CDS and CDCC. It's done ahead of time if you're doing it properly.

For regulators, sure, CDS and CDCC could be nice, central sources of getting data, and they do. I think fairly regularly the Commission or the Bank of Canada would go and ask for certain information on an ad hoc basis. I'm not aware they ever go and ask on a continuous basis for information from CDS or DTCC, a clearing entity, because it's too late to do anything about the risk once it's in those systems.

I guess the last thing I'd say about this, I was kind of surprised what wasn't in the Maple proposal because there was one particular thing I thought they would have championed given the make-up of

their group and they didn't. That's the inclusion of the buy side.

If you look at the structure of it, our market here and CDS and CDCC, they cover electronically all the brokers and the dealers -- the broker/dealers and the banks are all electronically linked in CDS.

I've had clients from U.S.

broker/dealers or custodians in the U.S. come up to Canada, and they know when they come to Canada they can join CDS and that immediately connects them to every dealer and every custodian in Canada they might do business with. They don't have to set up bi-lateral relationships; they know they perform the same function. They know that anybody they're going to deal with is represented there.

That's not true of the buy side. The buy side is outside of that group, and they have to come in through various other mechanisms. And that is, I'll say, one of the downsides or flaws in our market. I was surprised that the buy side being a big part of the Maple Group didn't highlight that as a potential benefit of what they were trying to do. I won't give them any more suggestions at this point.

So I'd like to talk a little bit about what the likely impacts would be. Hard facts, because

I know there were some questions about this, and I predicted that I quess.

I think, first of all, it's fair to say costs are going to go up. I don't know going from a not-for-profit to for-profit, that wouldn't increase those costs to the market as a whole. I don't know that that's really the major point. If it gets ridiculous it will be, but I think it's what do you get for that. If the costs go up, okay, but that's the benefit we get out of that, "we" as a market? I know the shareholders would benefit and that's a good thing, but what does the market as a whole benefit from?

I don't think there's anything from cross-margining, from risk management, and I don't think there's much in innovation. I think CDS and CDCC is -- CDS is not-for-profit, CDCC is for-profit. I don't think anybody would classify one or the other as better at innovation.

The next point, when I read Maple's proposal it was -- and I know a lot of people in clearing and settlement...I think the best word I could use is "shuddered" when they used the Deutsche Boerse as an example for their model. If I was a shareholder I would love it because running a for-profit monopoly is a great business to be in if you're a shareholder.

As a user of the market, it is not a good thing.

I'm going to give you some examples because I know there's been a lot of questions about how much does it cost to do this.

The answer is: You can't tell. If you tried to read CDS's price list you could have consultants reading that forever to figure out how much it is. That's the same with all of them. If you look at Deutsche Boerse, Clearstream's price list or DTC for that matter. When people have asked me about this, I've often suggested a way to kind of get rid of -I'll step back a bit.

The reason is because they all price differently. I'll give you a concrete example. Years ago, CDS never used to charge people for the processing of an entitlement, so a dividend, interest payment, tender offer, that was all embedded in the other prices that they had. Recently, they hived those out. So instead of bulked-up prices they separated those prices. Other depositories do that; others don't. So if you're trying to compare what CDS charges to what Clearstream charges, you have to look at which of the 86 items you're talking about when you go to do that.

Now, there's one way I've always suggested you could get around that very simply, what

you call all-in comparison. The theory there is the reason people go to these places is because they want to trade. I don't know anybody who puts their securities in a depository and leaves them sitting there for ten years. They're in a central securities clearing and depository company because it makes it very efficient to clear and settle trades. That's not strictly true, but I think that's a reasonable assumption.

So if you assume that that's the way it should be or the way you're going to measure it, what you do is take the total revenue that CDS charges for their services and divide it by the number of trades they do. If you do that with every depository clearing corporation, you will get a representative number of how big it is to do that. I'll give you numbers.

So if you do that for CDS, as of 2010, 26 cents per trade, so their clearing and settlement revenue, not talking about what they charge for SEDAR, was \$83 million and they did 320 million trades, both exchange trades and over-the-counter trades. So that works out to 26 cents per trade.

It's not true people are paying a penny per trade. That is true if you did one exchange trade and didn't sell anything. You have to have a position

to settle, they charge you to settle it, to hold the position, they charge you for the dividend you pay and so on.

If you do that same analysis for Clearstream, the price is \$6.73 Canadian per trade. So their revenue was 781 million Canadian, and they did 116 million trades. So they did about half the number of trades, processed half the number of trades CDS processed.

If you do that same thing for DTC, the price is about 5 cents a trade, 4.5 cents a trade. So their revenue was 923 million, and they did 20.4 billion trades.

So there was a question earlier about DTC, and I'll give my opinion. Yes, it's the size. These are fixed-cost business by and large. There are some variables. So the more you pump through it, the more the unit costs come down. So if you look at DTC they're doing 20.4 billion trades. Yes, it is always going to be cheaper in the United States to clear and settle trades.

The reason CDS is cheaper is our market -- from a trade point of view, if you looked up statistics, the number of trades we do is much bigger than the European markets. So even though Canada is a

much smaller market than the one Clearstream serves, we did twice as many trades. Fixed costs? You can lower the unit cost.

COMMISSIONER KELLY: And you could just keep expanding.

MR. STEPHENSON: It's not strictly fixed costs. It's not like you put it in and it handles anything. It's the size of your hardware and so on. But it's not a linear relationship. You know, it's a very low, sloping curve there. If the market volumes today doubled I don't think CDS would do anything in terms of costs; it would just happen and they would handle it. So the unit costs would come down.

That's also, I think, true of the trading business. I'm not a trading expert, but it is also kind of a fixed-cost business as volumes go up and down. The question is how many of the -- if volumes go up 50 percent do they decrease the costs 40 percent and keep the other ten? That's not a bad thing. That's a for-profit business. We're all in business. So it's a question of how much.

I guess the point I would make here, we are at 26 -- and nobody can -- because of the rules I mentioned, nobody can say, well, I'd like to save all

that money and do my business in DTC. It's not possible right now.

COMMISSIONER KELLY: And again just refresh our memories. That's because it's a U.S.-dollar-only -- base?

MR. STEPHENSON: I'm going to touch on that, actually. So I think what needs to be done there is a re-examination of some of the rules and policies we have here in Canada that assumed we would have a not-for-profit clearing entity. So that's not to say that it's bad to make it for-profit; it's just that at the time when some of the rules were developed it was not for-profit. It has been for 40 years. Prior to that there was nothing. It wasn't centralized; it was a bi-lateral -- you know, people running around the streets with certificates.

When CDS was developed and in the last 40 years it's always been that way. So when people came along to develop rules and so on -- I think about how would I have done this if it's for-profit. For example, nobody's ever thought about why would we need a choice as to where I send my trade on the exchange; I don't need a choice; there was only one place together. In theory, it's got the lowest price; that's where my trade goes. Doesn't matter whether I trade on the TMX

or Alpha or Chi-X; it goes to CDS.

I think if you're going to contemplate a for-profit entity, then you have to give people choice or potential for some choice. So that means some rule that says I get to choose where I'd like to do my clearing with.

Another example is the best execution rule. I think that rule probably assumed again that costs were the same everywhere, the clearing costs, so if I traded on the TMX and the price was a dollar that that was better than if I traded on Alpha and that price was \$1.01. It's a penny cheaper, it must be better.

Well, I'm not sure it would be better if the clearing costs from the TMX were -- I'm not saying it would be, but \$6.73, and the clearing costs from a trade I did on Alpha were 25 cents. In the end, it might be better for me as a client to pay the extra penny when I bought it to get the cheaper clearing, but that's not something anybody ever had to think about right now because there's only one price, it's the same for everybody, and when I trade on those markets there's nothing to choose between them. And so the best price on that market is what we want to focus on.

But that may not be the case in the

future if we have competition and there's people out there offering lower-cost services, better services, whatever.

I think there needs to be a relook at some rules that probably assumed or at least didn't have to consider that the clearing function was a for-profit business. Again, I'm not saying all of that's bad. You might say nothing needs to change here when it goes to for-profit; I think some of them probably will.

So as the example when the LSE deal was going on, CDS made a submission that said we think people should be able to choose where they send their trades to clear because they were concerned that the LSE was going to bring up clearing themselves and there would be some competition, and of course they would naturally feed those trades to their own clearing organization.

The last topic I guess I'd like to talk a bit about is innovation. I mentioned before there's many, many small players. I'm a very small company. There are some bigger companies in our market and they provide innovation in what we do, what we do as a market. So my business focuses on something called straight-through-processing, exception processing, and

I think we have to be very careful -- wasn't clear to me, so I'm not suggesting this is the case, but my business and what CDS does and what other clearing companies do there's a fairly large grey area in between them. I would say there's not a month go by I don't have a discussion with one of my clients about whether they would like to have me build something for them or go to CDS and have them build it. That happens all the time. Doesn't happen on some things. Nobody comes to me and asks me to risk manage CDS, but all kinds of people come to me and ask me to provide feeds to CDS rather than using CDS's functions.

So, again, I realize I'm being self-interested here, but I think it doesn't mean it's wrong. It's good for the market that we don't do something that prevents those from happening. So I mean that we don't do something that TMX or Maple Group says, well, you can't deal with these small players because we want to get in that business. And I don't think that's far-fetched to think that.

It hasn't happened recently, but I'll say five years ago that happened fairly regularly with my business and CDS -- it changed dramatically, but where they thought that I was sort of in their area and they wanted to do things that would scoop some of the

business I was doing. That's fine. To compete is fine, but it's kind of difficult to compete with a source.

The last thing I'd like to mention I guess is about reliability and quality because that's the keystone, I think. I mean, what the market at least in the past has wanted out of CDS and what most people want out of these things, number one is reliability.

Because of the financial crisis there has been lots of -- the term "too big to fail" came into the popular lexicon. I don't think that really applies to CDS, but I always say it's "too important to fail".

So I can say, and people can go check, there has never, ever been a day when CDS did not function. Ever. On purpose. And they spend huge amounts of money and time make sure that's what they provide.

It's very difficult to make money when you're providing that. We're talking about going from the -- systems people always like to quote 99.2 percent up-time and all that stuff. It's very, very costly to go from 99.2 to 99.9, very costly. But they have to do that because the payment system in Canada doesn't

function if they're not there, the debt markets don't function, the repo markets don't function. None of that functions if CDS is down. They focus on: We have to make sure this works.

People are going to get very upset, but I'm going to say it. I didn't read the transcripts of everything yesterday, but I did scan them, and I noticed there was a discussion about the repo project that CDS's been doing. I'm going to say a few things about that because I think it's a good comparison.

CDS is a not-for-profit, and CDCC is a for-profit. That project's going on for 24 months, not nine months. It's 18 months late right now. The reason that nobody will commit to use it is because they haven't been able to demonstrate yet that it's reliable. So they've been through ten rounds of testing, and they still have sort of 40 percent error rate, and that's a for-profit company. 80 percent of the processing goes on there is being done by CDS, the not-for-profit. And that happened last September, come in and assist that project because it was in some trouble.

So that's not to say it's not going to be successful or great ten years from now everybody will forget all this and think this is the best thing

ever. It's just if you're trying to compare for-profit and not for-profit, if you were to ask anybody involved in that project right now they would choosing the not for-profit route.

I could probably go back and tell you stories about skeletons that CDS has on projects they've done. Everybody has those things.

I guess my point is it's not whether you're not-for-profit or for-profit that determines that; it's the people you have, the way you process it, the approach you bring to it, so on and so on.

I guess finally I'd like to say there are opportunities for synergies, I think. Clearly, there would be. My view is I think most of those are more administrative things.

CDS's data centre is already in the TMX data centre. That happened years ago as an industry cost-saving thing. So it's not like you're going to get rid of a data centre and say you saved money. That happened already. And the organization didn't merge to do that; they just shared that facility.

There are other models. You know, years ago -- it doesn't happen now, but years ago the New York Stock Exchange and the clearing part of now what is DTCC, then NSYC, they used to have or shared a

technology company that ran both the trading system on the New York Stock Exchange and the clearing software. They didn't run the company, but they provided the company. They changed that. DTC does all that themselves.

But that's possible. I mentioned already there are multiple vendors out there that could provide common data. If you wanted to look at things together that's pretty easy to do.

I think you've been probably told about cross-margining agreements. One way to look at this, what would happen if CDS took over CDCC and made it not-for-profit, what would the list of benefits be. Would the benefits be, cross-margining, whatever -- maybe that's another way. Would you lose any of those benefits?

I guess the last thing I would say is about my role or companies like mine in innovation. I would reiterate I think there needs to be a re-examination of the rules and the policies to figure out what would be different now that it's for-profit. That's not to say the rules will be worse or bad. I just think you need to go back and look at that.

And I think there needs to be some work done to encourage competition. It is impossible right

now under the current rules for anybody to set up a competitor in this business. You can compete around the edges, and I do that now. I provide services to clients that some people might think are CDS or could be. But to be the actual clearing depository, it isn't possible with the current rules. It is possible with some rule changes and some things to encourage people to do things differently.

An example, I'd say in the U.S. they had a similar thing like this years ago with what's now called OMGEO. It's a joint venture between DTCC and Thomson Financial. They used to compete with products to do that, and they joined up together. The SEC examined some rules and passed what they call interoperability rules which were rules that said that OMGEO, since you've got such a dominant position you have to do certain things to allow other people to link up to you and not discriminate against them based on technical standards or prices. Probably a good example for us to look at. I'm not saying you would do it the same, but just look at the same sort of approach.

 $\label{eq:continuous} \mbox{I think I landed over my time there, so} \\ \mbox{I'll stop now.}$ 

CHAIR: Thank you very much.

Mr. Stephenson. There's a lot of issues and ground you

covered. I'm going to try and sort of ask you a few questions and take some of the personal views which we obviously received and some of the other experiences that you've had. A couple of points of clarity would be helpful because you've covered a lot of areas. I remember the T Plus 1 days quite well.

The issue of DTC keeps coming up. You sort of indicated why it is you think a clearing there is not viable, and you pointed to some rules or requirements set by Canadian regulators I suppose which suggests that you cannot do that, or American regulators which precluded that from occurring.

But what would prevent DTC from coming here and setting up an operation and clearing in Canada, particularly given having a desire to do it? They would have to be recognized to do it, but why wouldn't they do it?

MR. STEPHENSON: So they could do that. Assuming you could recognize them, they could do that.

The problem is that the people trading on the Toronto Stock Exchange and Alpha and so on do not have a choice to say I'd like the trade sent to DTC to be cleared.

I don't think that was the intention.

I think it just wasn't necessary when it happened. So

even if DTCC set up shop here, I don't have a choice to say to TMX that trade I executed on your exchange I would like you to send that to DTC to be cleared rather than your in-house clearing organization.

CHAIR: I'm assuming that's a regulatory requirement.

MR. STEPHENSON: I think it's the absence of one. When these sorts of things were set up nobody thought about we need a choice here. There wasn't a need because we had one clearing company, a not for-profit. So why would I do that?

CHAIR: I'm going to just take this a step further. If there's no regulatory requirement that says you can't and if DTC makes business decision having an opportunity in Canada particularly, if I accept your numbers at 5 cents versus 26 cents - I'm going to ask you about that in a second - then it seems to me it doesn't answer the question I'm putting to you, which is why wouldn't they do it, given there isn't a regulatory requirement saying they can't do it and it's just a practice?

MR. STEPHENSON: I guess what I'm saying, if I was DTC and I said I want to go set up business in Canada, I'd think about how am I going to get people to send trades to me to clear. And the

answer is there isn't a way to do that.

CHAIR: So you would assume, I suspect, that the 40-some-percent that represent the market in the Maple transaction would obviously not send trades for clearing to their competitor; would that be fair?

MR. STEPHENSON: I think so, yes.

CHAIR: Is that more or less what you're getting at?

MR. STEPHENSON: I'll phrase it another way. If the Commission or IIROC said, okay, TMX, Alpha, everybody, you have to provide a mechanism for people to direct their trades that they execute on your market to their own clearing organization of choice, then DTC would say now we have an opportunity to come up and say I'll charge you 5 cents or 10, make a nice margin, it will be cheaper than the other guy, and I know there is a way to do it, and this is what you tell the TMX under Rule whatever that I'm allowed to do this, and that's a mechanism to do it. That mechanism doesn't exist.

CHAIR: Let me just take one more question, then. You're just saying it's probably viable; it has nothing to do with the technology, nothing to do with their capacity. It's this other sort of constraint that you believe exists that would

preclude that. Would the same hold true for Clearstream?

MR. STEPHENSON: Yes. I mean, I'll say there is some technology constraint on size. These again are volume businesses, so the bigger you are the lower your costs and so on. So there is some -- I don't personally think that's the obstacle. I don't think it's -- I know other people say it's impossible to do this, you can't set it up. I don't think it's true. I think it's impossible under the current rules with the way things are, but I think with some changes it could be possible.

commissioner Kelly: To my question earlier to Mr. Summers, what's to stop a Canadian entity trading an interlisted security in New York, which clears at DTCC, to deal directly with DTCC as opposed to the situation now where they must go through CDS to DTCC?

MR. STEPHENSON: I think two real obstacles. One, you have to be a member of FINRA to do that. Most dealers don't want to do that.

Putting that aside, let's assume that's not a problem, the real issue is if the dealer up here is buying the security for a Canadian client, an institutional client, that institutional client wants

the security delivered to their custodian which is in Canada, and they're probably doing it for Canadian dollars, so immediately there's a foreign exchange cost because if I execute it down there -- and this does happen all the time. People buy in the U.S. and sell in Canada; they buy in Canada and sell in the U.S. It's a very big business now.

So they do execute down there, they do settle that part of the trade in DTC, and then they move the security cross-border. CDS and DTC have a link to do this, costs me \$3.80 to do that. I then get it in my account up here and then deliver to the client's custodian up here. That does happen all the time for whatever -- better price down in the States and FX conversion is not a detriment. So I'll execute it, flip it up here, and sell in the Canadian market. So it is possible. It's expensive. It's that movement back and forth. The industry calls them northbound and southbound flips.

COMMISSIONER KELLY: Do most Canadian firms have multi-currency platforms? You mentioned DTCC; they do only U.S. dollar. But don't most Canadian firms have multi-currency platforms?

MR. STEPHENSON: Yes.

COMMISSIONER KELLY: So that shouldn't

really be an issue for them?

MR. STEPHENSON: Not so much for them. For the client if there's an FX charge. I don't think that's the obstacle because, like I said, it's a very large business where people execute in the U.S. There's a lot of business where people buy securities in the States and sell them in Canada or vice versa.

I've been in a number of meetings at my clients where they try to figure out how can I get around this \$3.80 charge to do this because, you know, they're now in the -- I bought 17 shares down there, and I got to get them up here, \$3.80 is a lot of money to pay for 17 shares. They've tried all kinds of ways; there isn't a way.

COMMISSIONER KELLY: You said "too important to fail" at the beginning and end of your presentation. I guess what I'm curious about is in a for-profit environment how are the risks magnified? What are the one or two things that would keep you awake at night?

MR. STEPHENSON: There's two things.

I'll use myself as an analogy. So I'm in a for-profit business. I have systems that process billions of dollars of stuff every day.

I don't test my systems like CDS does.

I can't afford to. I mean, to get again to that level of perfection, I can't afford to do that. For-profit can't do that.

Now, I don't have to because if my system fails it's one participant for an hour or two or something.

CDS is different. If they fail the whole market is down. So the risk part, when people talk about risk, they usually think about financial and credit risk, operational risk. I think about the testing part of it. And I know from being at CDS and from their history that they spend huge amounts of time and money doing that.

I'm not sure -- well, I'm sure a for-profit entity wouldn't do that. They would say, well, I don't need ten people to test things; I'll do it with four or five.

COMMISSIONER KELLY: How would a for-profit CDS interact with a not-for-profit cost-recovery DTCC? Does that relationship change in any way, in your opinion?

MR. STEPHENSON: I think so, yes. I don't have all the answers. I go back to what I opened it on the T Plus 1 analogy. I don't have the answers there; I know there's a question there. I don't know

it's tied just to CDS and DTC.

If I can step back, I was probably too wordy back then, but if there was a concern that our market was different than their market in the terms of T Plus 1 and T Plus 3 that warranted all this attention and analysis, I think this change between our market and their market warrants triple that amount of attention.

I'm not saying the outcome is a bad outcome. The outcome might be that there's no problem or it might be that the outcome is that this is good for our market, it will give our market an advantage over your market. I don't know the answer to that question. I just know there's a question that needs to be focused on and analysed.

If you're talking about strictly CDS and DTC, you know, if CDS is making lots of money out of something they're doing jointly, DTC's going to want to be in on it. There's always the -- and they do. I mean, this \$3.80 charge, which is obviously much larger than the domestic fees, the 5 cents DTC charges or Canada charges, in some sense it's because we are charging the other guys; it's not my -- you know, it's an American sometimes flipping it north, American dealer trying to do that, or Canadian. In some sense

there it's an easy target, right? I can charge a fee on the guys that aren't on my board of directors or paying my normal bills, and I can jack that fee up. There's an opportunity for that. It happens today.

COMMISSIONER KELLY: You said you didn't like the term "plumbing". What would you prefer?

MR. STEPHENSON: It was more what end of the plumbing they were talking about, the top or the other end, I don't know.

COMMISSIONER CONDON: Just say a bit more about the other CDS activities. You mentioned it's the backbone of the payment system. So what would you expect would get transformed about the more global operations of CDS in a for-profit environment?

MR. STEPHENSON: I was at CDS, and I was involved in that payment part. CDS didn't get paid for it. They do not charge anything for it. The functionality that they provide for that is hugely complex, hugely expensive. They didn't charge for it because it was seen as, well, the banks and the Bank of Canada and so forth needs this. And that's what CDS is in business to do.

I would have a hard time thinking of -- it's not that it wouldn't get done, I don't think. I

just think the for-profit entity would say, all right, we're going to spend 10 million bucks on this, we got to make money, we're going to charge 12 million or something. You would have to pay it. It's that kind of thing that.

You know, there's nobody at CDS that thinks -- it's not that they don't think about the cost of doing things; it's that the cost isn't an obstacle to doing things. Nobody thinks we're going to make "X" amount.

I guess the other thing I'd say is there's lots of things in this business, and it's in every business, that people make money out of being inefficient. And so there are lots of things that would be done for efficiency reasons that wouldn't get done if you were strictly looking at profit.

I'll give you an old analogy. When CDS first came into being one of the things they were doing was dematerializing or taking certificates off the street. The people that ran vaults in banks and had big staffs doing it didn't like that very much.

Even as recently as five or six years ago there's stories about in the U.S. where companies that printed certificates would go out on speaking tours and tell companies how easy it was to take over

their company by putting their securities in DTC because the sheer obstacle of collecting all the certificates was going to prevent them from being taken over. So they had an interest in not having it happen so they would fight against that. And there's all kinds of examples.

I mean, CDS does things like that, too, where it's not in their financial interests to do certain things, and they try not to do it, and in some cases their owners overrule them, in some cases they don't.

When the for-profit element comes in, again, I'm not saying that can't be controlled or can't be made transparent but there is certainly a bigger tendency to say we're not going to do this because that's going to take the number of trades from a million down to 10,000. And we charge per trade so we want a million. We don't want 10,000.

CHAIR: So it does go back to the point which a lot of individuals who have been suggesting, and I think you are more or less suggesting that it cannot go ahead in its present form without more regulation.

MR. STEPHENSON: Yeah. I think your question to the earlier gentleman about economic

regulation and price regulation, and I probably read about that in Economics 100 but it sounds pretty complicated to me so I don't think that's a really good route to go. If it is, I think it is competition we need to have. We need to have ways to say DTC can provide some competition or some other firm can set up competition and be a real push. I said in my letter if the owners want to sell CDS I don't think somebody should say no. I have a lot of people who say I'm an idiot for saying that, but I don't think that's the If that's what they want to do. It's not that a for-profit model can't work. There are lots of things to think about if you are going to a for-profit model, one of which I think is you have to do something to at least allow potential for competition. It may not develop but it's impossible right now.

CHAIR: As you can see, that's what we're thinking about, having these kinds of proceedings because it raises those issues. I mean, there is a practical business issue here, an important issue of the costs associated with changes in the market structure. Business models when they change, it's challenging to change them, often the changes require somebody to pay for them. It often is more than just the shareholders, but that's part of the cost

associated with change. Innovation drives a lot of change for obvious reasons, and you're in that business.

MR. STEPHENSON: Yes.

CHAIR: But it seems to me that what we hear loud and clear throughout is the transaction seems to be raising not only these business concerns, if I may put it that way, but they also raise important public policy concerns, which suggests so many examples here of imposing more regulatory oversight of key aspects of particularly the clearing and settlement let's say going beyond conflicts of interest, beyond governance to suggest that there has to be some greater control or oversight over the transition to what we call a for-profit model.

MR. STEPHENSON: Yes.

CHAIR: Now, there are many ways of saying it, Mr. Stephenson, but I hear that loud and clear throughout. Now, we use analogies as some say electricity pricing, some say economic regulation, some say monopolies, and if it's essential services, the normal reaction to that and to protect the public interest is regulation. Sometimes competition.

What are you really saying here?

MR. STEPHENSON: I think the word

transition is good because I think obviously if you go from Friday, it's not-for-profit to Monday, it's for-profit the competition isn't going to be there in an instant. So it's a long-term process. I think for a transition period, yeah, there probably needs to be some sort of regulation on pricing and so on.

Personally, I don't see that as sustainable. That's only there because isn't competition.

If we make these other rule changes and other market changes that brings in competition, there wouldn't be the need for that because you'd say just like the exchanges and the ATSs, we have got lots of people that can do this, they can compete. They can drive each other's prices. They can innovate.

But we're going from this to this. That's not going to happen in an instant.

CHAIR: Let me give you an example you heard. So I'm not disagreeing with you in the sense of what you're suggesting. Obviously competition plays an important role in our markets. But you heard about the momentum initiative today with respect to Alpha. Are you aware of it?

MR. STEPHENSON: Vaguely.

CHAIR: Theoretically, given the structure and competitive clearing and settlement

system, why won't you have a momentum initiative towards clearing and settlement? How do you avoid that?

MR. STEPHENSON: You could. Again I said you could, but but not under the current rule structure. I'm not saying the rule is you are going to regulate the prices. I'm saying rules like people have to be allowed to choose to do their trades with us. Those sorts of rules.

CHAIR: One other thing I would say there is I don't really think we heard anybody so far even suggest that there was a viable competitive alternative to clearing and settlement of CDS.

MR. STEPHENSON: I know. I would disagree with that. It's a long-term thing. Anybody who says it's impossible, I don't think anything is impossible. I think with the right incentives and right structure, I think that's possible. And it's not a black-and-white thing. CDS or CDCC, you know, there's a lot of things they do. People could compete with pieces of it. The could do parts of it. I don't think it's impossible to compete with them overall but it would take time, and it would take of this these things we take for granted because it was only one and it was not-for-profit.

COMMISSIONER KELLY: It would be difficult to build, I presume.

MR. STEPHENSON: It would be, yes.

COMMISSIONER KELLY: Someone in the

business --

MR. STEPHENSON: I'm not saying it would be easy. But easy is not impossible. That's not the same thing.

COMMISSIONER KELLY: If Paramax had unlimited funding, it would still take you years I would presume before you --

MR. STEPHENSON: It would take a long time, yes. Again that's not to say that pieces of it couldn't be done. It's not black and white like, start here and stop there. There would be pieces of it you could do. If somebody came to me right now and said that, I would tell them what I said here: It's impossible to do under the current structure we have in this market. But with some changes, sure. And some of it's easier, some of it's harder.

CHAIR: Could you build clearing without the settlement?

MR. STEPHENSON: Some of it, yes.

CHAIR: I was interested in your comment on the 26 cents because I really have not heard

a staggering figure like that. We hear figures like 16 cents for the Deutsche Boerse. So are you suggesting that the one cent or two cent, I think we hear two cents or so for clearing? How could we have a figure of two cents which we seem to rely on and say we're low cost, second lowest cost in the world, and you come forward, Mr. Stephenson, and I'm not suggest you're not right, and say it's 26 cents?

MR. STEPHENSON: I'll give you an example. So if I do a trade on the Toronto Stock
Exchange or Alpha or anthing, that trade gets sent to CDS, and CDS charges me a penny to receive that trade.
Now, if that's all I had to do you would have your penny. That's not all I have to do. I have to actually settle that trade.

So that trade then gets combined with -- say I did a hundred other trades like that security and it gets netted. I get charged for that netting.

Then I have to settle that net position. I get charged for that settlement.

In order to settle that position I have to hold it at CDS. I get charged to hold that position at CDS. If I hold it at CDS there are going to be entitlement to dividend interest payments. I get charged for those things.

So it's possible that I do a trade that costs a penny. Very unlikely. It's also possible that I do one that costs 60 cents because of the streaming it goes through and how many times it gets netted and how many pieces get settled and so on. That's why I say you can't say it costs a penny. You can't say it costs 26 pennies. What I'm saying is on average if you added up all the costs, all those things I mentioned, it's 26 cents.

Now, if I'm somebody -- I'll give another example.

COMMISSIONER KELLY: Is that still the second lowest?

MR. STEPHENSON: Sure it is. It is.

COMMISSIONER KELLY: Where would the

Deutsche Boerse be?

MR. STEPHENSON: \$6.70. So, I have a client that's a bond broker. They don't hold positions in CDS. Ever. So none of those costs of the holding of securities or paying of interest, that never applies to them. They pay only to have trades input to CDS and have them settled. So their cost would be different than the sort of normal participants that holds hundreds of thousands of shares or millions of shares or billions of bonds, and settles them every day. The

cost of doing a non-exchange trade -- all the debt markets, all the money markets, all the deliveries to custodians. I don't have the price list but I think it's 12 cents to do one of those.

So the one penny charge is referring to a trade done on an exchange in Canada. There are many, many, many other things I get charged for to do business at CDS. That is no different than CDS or DTCC anybody else. What I'm telling people is if you are going to compare them, you can't go and say I'm going to compare -- well, it's possible CDS could come and say, make it free or give up that penny. I'll just add a penny on to this other part that you have to do, and then they could go out and say with we're free. But that's not comparing apples to apples.

THE CHAIR: So, Mr. Stephenson, when you think about the purposes of clearing and settlement in the sort of environment of the capital markets, if you could take that back to institutional and retail investors, let me ask you this. What do you think besides cost, what do you consider to be the implication of remaining with the status quo but always improving CDS, innovating and doing what needs to be done to deal with potentially new products or higher, greater trading, either introduced through the

frequency of trading or other matters, or whatever developments occur in the market, more complex products they might enter into for clearing and settling? What do you see as the implications of this for those institutional traders and for individual investors.

MR. STEPHENSON: It comes back to what I said about the plumbing comment. Even institutional investors, most of them have no clue what happens once they do the trade. At a time like this, that's a bad thing because we're having lots of discussions about what it means and what would be good or bad.

The fact people don't have a background is not a good thing. In some ways it's a good thing because they take it for granted. They take it for granted because it works. I think that's number one. What the retail investor doesn't think about is how does my discount broker get my shares or how did he pay that money? They just know it happens. It's taken for granted that it happens.

So I think number one is that we want it to stay that way. That's not to say a for-profit entity will change that. It has the potential to change it. It's not to say it will for sure.

So if you wake up one day and you read that CDS didn't function one day, that will be the

hugest news not because of CDS itself and nobody will know who CDS is. It's because the government couldn't do their open market operations. The couldn't do repos. People couldn't finance things. I would put that reliability "too important to fail" number one. People don't think of it that way. They just think of it as ubiquitous. It just always happens, it's always there.

I'd say second to that is the cost, is the price. So if all of a sudden my discount broker says I'm adding a dollar clearing charge which I never saw before because somebody put their price up. It's embedded in the fee I pay, but just like airlines put fuel service charges on to say it's not my fault that your price is going up. I wouldn't say it's unlikely somebody would say I'm adding a clearing charge because the price went up. People will then be aware of it. It's unseen now, but it might not be in the future.

CHAIR: I have regulated some sectors where that's occurred and it's not pleasant.

MR. STEPHENSON: Exactly.

CHAIR: But really getting at another point here, what do you think rather than what they know because, frankly, the whole capital markets and how it functions is highly arcane for most individuals.

And we understand most investors are really preoccupied with other things when it comes to investing in the markets. But I'm trying to get at the horizontal structure and the vertical structure and how you view that generally given your experience primarily on the clearing and settlement side. And does it make any difference from your perspective?

MR. STEPHENSON: It's ironic because when I used to work in little countries like Africa and Asia and that, the vertical model was always a sign of an immature market because people focus on trading first I think because they kind of understand that. It gets a lot of press. In some markets it's thought of as gambling. So people understand trading on whether that's done on a blackboard which is done in some places or a computer system.

What happens in a lot of places, the start with trading and it's fine. You can run around the street with certificates and whatever. They get to a point where that can't happen anymore. So late to the game they think about clearing and everybody looks at that as a cost. Nobody thinks of their back office as a profit centre. They always think of it as a cost so they're trying to get rid it.

Nobody wants to be in the clearing

business most places because they think I can't make money. That's generally the way it's thought. But generally it's the stock exchange that takes responsibility and says I'll set up a clearing company because I have to, to let my trading go through. So I always thought of it as a sign of an immature market and it was a good way to do it for those markets until it got to a certain size and a certain sophistication which they usually always split off for specialization reasons, conflict of interest reasons, for all kinds of reasons and even things like -- this is true of our market.

If you look at most of the big markets they have a private sector entity, DTC, and they have a government organization, the fed. Because the central bank down there wanted to have their own clearing and wanted to control it. There was a huge debate up here 20 years ago about whether that should be the model here, and the powers that be decided we were a small market. We couldn't afford to have two of these. We should have one.

So CDS is quite unique, actually. I'll say in my travels it was always envied in that it had both the government debt, provincial and federal municipal and the equities.

I spoke at two conferences with Mary Shapiro when she was a Commissioner, in her previous life, in Argentina in the late eighties and nineties in Taiwan and I heard her twice say that Canada was the model to envy. They wouldn't do it like this again in the States if they had their choice. It evolved for historical reasons. Nobody should try to emulate that.

In reality I would say nobody else is the United States. Nobody else is that big. If you're the United States, you can afford to have probably two clearing systems. Not many other people can afford that.

So in Canada quite rightly I think the market, the government, the central bank all got together and decided we should have one, again it's a fixed cost business. Let's keep the costs down. Put as much as we can through it. There's lots of efficiencies in having the debt and equity in the same place.

Americans struggle a lot of times with the fact they have to settle their government debt, collateral, in the fed, and they have to go through clearing banks versus doing it in DTC.

So we're quite unique in that. I'm not sure -- I can't say one way or the other. I'm not sure

it would have evolved that way if it had been for-profit.

If 20 years ago when the Bank of Canada was looking at all this and there was a big debate I know and lots of people on both sides, I don't know they would have said yes we have should do this if CDS had been for-profit. I'm not saying they would or wouldn't have. I think it would have been a different analysis and a different conversation.

CHAIR: I think that concludes our questions, Mr. Stephenson. Thank you very much so much for coming and sharing that information with us.

MR. STEPHENSON: Thanks.

CHAIR: So I think that's it for all our presenters.

We on behalf of vice-chair Condon and Commissioner Kelly I'm going to thank all the participants for presenting their views on the Maple Corporation acquisition of the TMX group CDS and Alpha.

As I indicated in my opening remarks yesterday, this policy hearing is part of the public comment process being considered by the Commission in respect of the proposed transaction.

Now, at this point it's our intention to obviously examine the information that we have

received both in writing, sort of in a typical comment process as well as orally by the participants here, and we have really found the participation to be very, very high quality and very, very helpful, and I really want to thank everybody who came. I'm sure this information will assist us in determining whether issuing recognition orders as proposed are in the public interest.

I know that there has been some interest in timing, and I'd like to emphasize that the OSC is conscious of the timing of the proposed transaction. However, I must also point out that there are multiple regulators involved in this review which we must keep in mind as we continue with our review of the transaction. So having said that, I want to once again thank you all again for your participation and your interest in this very important matter. Thank you.

--- Whereupon proceedings adjourned at 3:09 p.m.